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# Strategy Making:
# Strategic Initiative Implementation in the Context of Renewing a Firm's Sources of Competitive Advantage

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# Abstract

Strategic initiative implementation has evolved in recent years as a new and progressive form of strategy making. In this regard, strategic initiative implementation constitutes one of the central topics of strategic management regarding how firms can renew their most valuable sources of competitive advantage: the firm's idiosyncratic resources and knowledge base.

Strategic management concepts and practical guidelines are still lacking on how strategic initiative implementation affects a company's idiosyncratic resources and knowledge base and what kinds of challenging effects may evolve during the strategic initiative implementation. Therefore, the aim of this dissertation is to enhance our understanding of how strategic initiative implementation affects a firm's most valuable sources of competitive advantage. To achieve this aim, a qualitative case study approach is used to collect empirical evidence and describe the phenomena of strategic initiative related dysfunctions in the context of renewing a firm's sources of competitive advantage. The fieldwork started in October 2004 and finished in June 2007, and it comprised three in-depth case studies, based on three strategic initiatives; namely, the Sun Sigma initiative, the CRM Convergence initiative and the Balanced Scorecard initiative. The collected data were used to conceptualise strategic initiative related dysfunctions in accordance with the principles of grounded theory.

The study contributes to the strategy making literature in the area of resource based theory, the theory of dynamic capabilities, and knowledge based theory of the firm by extending the strategic initiative related strategy making concepts through proposing a new theory that depicts the dysfunctional effects of strategic initiative implementation. New relations between the resource based view and the strategic initiative concept are proposed in the context of strategic initiative implementation and the interactions between ongoing initiatives. Furthermore, the study highlights the role and value of strategic initiative related dynamic capabilities. New insights into the challenges and limitations of extending and recombining the emerging knowledge bases from ongoing initiatives depict the evolution of dysfunctional knowledge.

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I would also like to acknowledge the employees and management teams of Sun Microsystems, Inc. for their open and fruitful discussions during my case study fieldwork. Many of them in a high-level corporate context supported me with their empirical perspectives that are now integrated into this thesis. Access is frequently a huge obstacle for most field researchers. I was lucky enough to not have to worry about accessing the case company and their managers during this investigation.

A strong family and friendship foundation has served as a sort of reference beacon for organizing my priorities. Thank you to my wife for all those little extras and support which helped the research process.

Indeed, writing this page has helped me to realize how fortunate I am.

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# Abbreviations

| | |
|---|---|
| RBV | Resource Based View |
| CRM | Customer Relationship Management |
| BSC | Balanced Scorecard |
| CAO | Customer Advocacy Organisation |
| KBV | Knowledge Based View |
| DCT | Dynamic Capability Theory |
| SCA | Sustainable Competitive Advantage |
| SBAP | Strategic Business Architecture Programme |
| ROSS | Return on Sun Sigma |
| VRIN | Valuable, Rare, Inimitable and Non-Substitutable |
| GSO | Global Sales Organisation |
| PS | Professional Services Organisation |
| SSO | Support Service Organisation |

# 1 Introduction

Strategic initiative implementation as a new form of strategy making has evolved in recent years, especially within companies operating in highly competitive sectors like the information technology (IT) industry. IT companies have increasingly shifted from a yearly strategic planning process to a continuous strategy development one based on strategic initiatives (Marx, 2004). Strategic initiatives represent a progressive form of strategy implementation, whereby the idiosyncratic key sources of a firm's competitive advantage are mobilised and renewed (Bower, 1970; Bower and Christensen, 1996; McGrath *et al.*, 1995; Marx, 2004). In this regard, strategic initiative implementation constitutes one of the central topics of the strategic management disciplines regarding how firms can expand their resources and knowledge bases in order to improve their existing capabilities, or develop new ones, and thereby renew their key sources of competitive advantage (Penrose, 1959; Teece, 1982; Wernerfelt, 1984; Daft and Weick, 1984; Maidique and Zirger, 1985; McGrath *et al.*, 1995; Nonaka and Takeuchi, 1995; Grant, 1996; McGrath, 1996; Eisenhardt and Martin, 2000; Rugman and Verbeke, 2001). Furthermore, strategic initiative implementations are result-oriented and flexible, and they extend the static strategic planning process into a more dynamic one by combining strategic thoughts and implementation at the same time as involving a wide range of different stakeholders within a company, from top management to almost all members of the organisation (McGrath *et al.*, 1995; Lechner *et al.*, 2003; Wielemaker; 2003; Marx, 2004).

However, there is still a lack of strategic initiative implementation concepts within the strategic management theories (McGrath, 1996; Uzzi, 1996; Chung et al., 2000; Lechner et al., 2003; Wielemaker; 2003; Marx, 2004), especially on how strategic initiative implementation affects a company's idiosyncratic resources and knowledge base and what kinds of challenging effects may emerge during the implementation. Moreover, guidelines are still required on how strategic initiative implementation can be managed professionally to assure the quality and results of the firm's strategy making process. Therefore, the aim of this dissertation is twofold: a) to improve the understanding of how strategic initiative implementation affects a firm's most

valuable sources of competitive advantage, namely, the firm's idiosyncratic resources and knowledge base, and b) to determine what kinds of challenges (dysfunctions) arise during the initiative implementation process. Specifically, the research defines a strategic initiative as a vehicle for the implementation of strategic objectives that were predominantly originated by the top management and/or key decision makers of the firm. Based on this notion, this research positions the top management and key decision makers as the change agents within the organisation. Therefore, to view a strategic initiative as being functional or dysfunctional will largely depend on the outcome of the initiative and how much the results vary compared to the outcome anticipated by the top managers.

## 1.1 Research objective and focus

The challenges which emerge during the strategic initiative related renewal process are still insufficiently observed and conceptualised (McGrath, 1996; Uzzi, 1996; Chung et al., 2000; Lechner et al., 2003; Wielemaker; 2003; Marx, 2004). By examining the challenges related to strategic initiative implementation, this study combines and extends the resource based theory, the concept of dynamic capabilities, and the knowledge based theory from the perspective of the strategic initiatives.

From the perspective of the resource based theory, idiosyncratic resources are the most valuable source of a firm's competitive advantage. The mobilisation and re-combination of the existing firm resources with new ones are critical aspects of successfully renewing the firm's sources of competitive advantage (Daft and Weick, 1984; Wernerfelt, 1984; Block and MacMilan, 1985; Barney, 1991; Peteraf, 1993). However, the traditional resource based view gives an inadequate account of the dynamic aspect of renewing a firm's resource base (Collis, 1991; Teece and Pisano, 1994; Eisenhardt and Martin, 2000). In particular, the dynamic context of strategic initiative implementations is not fully discovered and linked to the resource based theory. Missing links between the resource based theory and the strategic initiative concept show a theoretical gap in how strategic initiative implementations may give rise to competitive bundles of resources or challenges by utilising initiative specific dynamic capabilities. These arguments extend the debate on the resource based theory

and integrate the dynamic capability concept and the knowledge based theory of the firm into the research focus.

Dynamic capabilities enable a strategic initiative to transform and deploy a firm's individual resources to create and renew the firm's sources of sustainable competitive advantage (Amit and Schoemaker, 1993; Teece and Pisano, 1994; Teece *et al.*, 1997; Eisenhardt and Martin, 2000; Winter, 2003). In this context, dynamic capabilities are fragile and unstable processes which reconfigure a firm's or another initiative's existing resource base through specific functionalities described in the literature as resource creation, resource integration, resource re-combination, and resource release (Karim and Mitchell, 2000; Eisenhardt and Martin, 2000; Eisenhardt and Martin, 2000). Therefore, strategic initiative related dynamic capabilities are not themselves sources of competitive advantage because their value resides in their ability to reconfigure a firm's existing resource base by relying strongly on situation-specific knowledge. In this regard, strategic initiative related dynamic capabilities have not been conceptualised comprehensively according to their role and value in contributing to the success of strategic initiative implementation. In particular, it is unclear how dynamic capabilities are relevant to strategic initiative implementations which successfully achieve their objectives and goals. The perspective that strategic initiatives develop and leverage individual dynamic capabilities to renew existing resources and extend existing knowledge bases incorporates the knowledge based theory of the firm into the research focus.

The increasing importance of knowledge as a strategic enabler for firms has superseded the static nature of the resource based view of the firm, and it has created a growing body of research studies on knowledge in organisations (Grant and Baden-Fuller, 1995). In this context, the perspective of strategic initiatives as knowledge creating entities focuses this study's discussion on how emerging knowledge bases are affected by strategic initiative implementations. Idiosyncratic knowledge bases are the sources from which initiative related dynamic capabilities draw specific knowledge to drive renewal of the firm's sources of competitive advantage. During this renewal process, strategic initiative implementation activities create new

knowledge which, in its turn, is stored and combined with other strategic initiative specific knowledge bases. From this emerges a theoretical gap regarding which kind of challenging effect may arise during this knowledge creation process, and the role and value of the strategic initiative related dynamic capabilities during this renewal process. Clarification of this unresolved area strengthens the assumption that knowledge is the most important resource within a firm: some scholars still deem it crucial to consider the strategic value of knowledge because not all knowledge is equally valuable (Eisenhardt and Galunic, 2000; Gupta and Govindarajan, 2000).

Various research objectives derive from the review of the main bodies of the literature. Firstly, the aim of this study is to observe how strategic initiatives affect a firm's most valuable sources of competitive advantage: their idiosyncratic resource and knowledge base.

By observing how strategic initiative implementations affect the firm's most valuable resources of competitive advantage, the dissertation focuses its observations on the interactions between the ongoing initiatives and interactions between the strategic initiative and the firm's organisational context. Secondly, by observing the interactions of the strategic initiatives this study analyses the emerging challenges that arise from different interactions and discusses the drivers of such challenges. In particular, concerning how a firm's idiosyncratic resources and knowledge base are influenced by strategic initiative interactions, this study aims to show how a strategic initiative affects the resources and emerging knowledge of a firm and other ongoing strategic initiatives. Furthermore, discussing how idiosyncratic resources and a firm's knowledge base are affected by strategic initiative interactions, the study seeks to discover what kinds of challenges emerge, how potential challenges arise during initiative implementations, and what drivers facilitate challenges against strategic initiative implementation. Finally, the intention of the dissertation is to furnish an integrated perspective on strategic initiative implementation and additional theoretical insights into the relative dysfunctions, thereby enriching the current concepts of strategic initiative related strategy implementations and their potential challenges

(McGrath, 1996; Uzzi, 1996; Soda and Usai, 1999; Gargiulo and Benassi, 2000; Chung *et al.*, 2000; Lechner *et al.*, 2003; Wielemaker, 2003; Marx, 2004).

## 1.2 Research Methodology and Design

Empirical evidence is necessary to answer the above research question, and to fulfill the research objectives, so a qualitative approach was appropriate for investigating the phenomenon of strategic initiative related dysfunctions in the context of renewing a firm's sources of competitive advantage (Glaser and Strauss, 1967; Strauss and Corbin, 1990). Based on the seminal works by Glaser and Strauss (1967), Yin (1984) and Miles and Huberman (1984) and Eisenhardt's (1989) generative account of using case studies for theory building provides useful guidance for the research design. The rationale of the case study research design adopted in this thesis is its flexibility in the use of multiple data collection methods, as well as its ability to articulate insightful stories embedded within the chosen social context (Van Maanen, 1983). A single case study approach has been selected to investigate the phenomena of strategic initiative related dysfunctions by defining the strategic initiative as the unit of analysis. The development of a case study protocol was appropriate for clarifying the necessary procedures and enhancing the reliability of the study (Stake, 1995; Yin, 2003). Necessary for this purpose was finding a company engaged in strategic renewal through strategic initiative implementation. Furthermore, the company should provide access to such relevant data as non-public information on strategic initiative insights. Sun Microsystems, Inc. was identified as the case company. Sun's primary approach to implementing its strategies related strongly to the approach of strategic initiatives.

The fieldwork started in October 2004 and finished in June 2007. Beginning with pilot interviews, the first aim was to select and verify the strategic initiatives for the in-depth case studies by collecting relevant background information on the company's strategic focus and business strategies at the same time. After the pilot interviews, three in-depth case studies were conducted on the strategic initiatives selected: Sun Sigma initiative, CRM Convergence initiative and the Balanced Scorecard initiative. To increase the range of the data collection for triangulation purposes, the researcher collected and compared data from different sources, including internal documentation,

published company information, on-site observations and semi-structured interviews with different stakeholder groups. In detail, fifty-one semi-structured interviews were conducted with different stakeholder groups that lasted between 1 and 3 hours, followed by various follow-up meetings and phone-calls to clarify and review the forgone interview topics and results.

A grounded theory approach was selected to analyse and interpret the data and conceptualise the new theory of strategic initiative related dysfunctions (Glaser and Strauss, 1967; Strauss and Corbin, 1990). According to Strauss and Corbin (1990) and in accordance with the principles of the grounded theory, different types of coding methods namely open coding, axial coding and selective coding were used. The different stages of open, axial, and selective coding were enriched by employing different analysis techniques. A line-by-line analysis, questioning and flip-flop techniques were applied to identify the relevant concepts and categories and their properties and varieties. Coding result comparisons were used to reduce the large number of emerging categories and a literature comparison was iteratively conducted to enhance the validity of the research. The comparison was supported by various tree-root-structures, mind-maps and memos to reduce the huge amount of qualitative data and advance the theory building process. Finally, the researcher developed lessons learnt from applying the ground theory to this dissertation to address the challenges of a grounded theory approach. In summary, all of the elements described in the methodology chapter show how the research was operationalised, and they help to make the research approach transparent for other researchers.

## 1.3 Theoretical relevance and contribution

This dissertation establishes a link between the resource based view and the knowledge based view in the context of strategic initiative implementation to renew a firm's most valuable sources of competitive advantage. Furthermore, the study highlights the role and value of strategic initiative related dynamic capabilities with regard to renewing the firm's most valuable sources of competitive advantage: its existing resources, and especially knowledge bases from other ongoing strategic initiatives. The study thus contributes to the strategy making literature in the area of

the resource based theory, the theory of dynamic capabilities, and the knowledge based theory of the firm by extending the strategic initiative related strategy making concept.

### 1.3.1 Strategic Initiative related Strategy Making

One of the main contributions of this study is its integrative and novel perspective on strategic initiative related dysfunctions in the context of successful strategy implementations. The study goes beyond the discussion of how strategic initiatives can facilitate the renewal of a firm's unique sources of competitive advantage. It describes the challenges and consequences that emerge during the process of renewing a firm's sources of competitive advantage through strategic initiatives. These consequences are termed 'dysfunctional effects', which constitute strategic obstacles against a firm's implementation of its strategies through strategic initiatives. Furthermore, the dissertation extends the work of strategic initiative related studies by highlighting the complexities of strategic initiative interactions with the firm's organisational context and other ongoing initiatives (Lechner *et al.*, 2003; Wielemaker, 2003; Marx, 2004). Finally, the findings enable this study to furnish an integrated perspective on initiative related strategy making by enhancing the existing strategy implementation concepts in the context of strategic initiatives (McGrath, 1996; Uzzi, 1996; Soda and Usai, 1999; Gargiulo and Benassi, 2000; Chung *et al.*, 2000; Lechner *et al.*, 2003; Wielemaker, 2003; Marx, 2004).

### 1.3.2 Resource Based Theory

The findings of this study improve our theoretical understanding of how the existing resources are combined with new resources in the context of strategic initiative implementation. According to Black's (1994) concept of "cogency relationships", a firm's resources are surrounded by various kinds of relationship which are established and extended through strategic initiative related interactions between the strategic initiative and the organisational context or interactions between ongoing initiatives (Teece, 1982; Barney, 1991). These interactions combine old and existing firm resources to shape new bundles of resources, but it is uncertain whether the expected results can be achieved because every strategic initiative enters uncharted territory to

some extent. Furthermore, emerging strategic initiative interactions explain how new bundles of resources arise from strategic initiatives and why it is uncertain that the expected results will be obtained. Every strategic initiative interaction carries the risk of creating challenges which lead to dysfunctional effects and the failure to achieve the desired results. Another contribution of this study is that it connects the resource based theory and the strategic initiative concept together. The interconnection with the strategic initiative concepts outlined by the study helps to overcome the highly static nature of the resource based theory and provides answers about why successful firms that are able to allocate sufficient resources to renew their sources of competitive advantage can potentially fail (Reed and Robert, 1990; Chatterjee and Wernerfelt, 1991; Foss and Knudsen, 2003; Peteraf and Barney, 2003).

### 1.3.3 Strategic Initiative related Dynamic Capabilities

The findings of this study contribute in different ways to the dynamic capability literature. Firstly, dynamic capabilities may be crucial for successful initiative implementation. According to this study, five different strategic initiatives related dynamic capabilities are the key factors in successful initiative implementations. This finding enriches the current understanding on the key sources of successful initiative implementations. Secondly, the value of the initiative related dynamic capabilities identified by this study resides mainly in their ability to improve the firm's existing bundles of resources and knowledge bases. In this regard, the strategic initiative related dynamic capabilities observed relate to a firm's idiosyncratic knowledge base: they provide for all the recognised core functionalities of integrating, reconfiguring, gaining and releasing resources and the extending current knowledge base to facilitate the renewal process of the firm's competitive advantage (Teece *et al.*, 1997; Mitchell *et al.*, 1999; Karim and Mitchell, 2000; Eisenhardt and Martin, 2000). Thirdly, the initiative related dynamic capabilities identified by this study perform a twofold role in the successful implementation of a firm's strategic objectives and goals through strategic initiatives. On the one hand, the strategic initiative related dynamic capabilities perform a key role in supporting the implementation of new strategies and business directions. However, on the other hand, dynamic capabilities create additional challenges for the firm and ongoing initiatives which produce destructive

outcomes for the business, termed by this study "dysfunctional effects". These dysfunctional effects are generated mainly by the five initiative related dynamic capabilities, and they result from the production of supportive and dysfunctional knowledge stored within initiative specific knowledge base.

### 1.3.4 Knowledge Based Theory

This study contributes in different ways to the knowledge based theory. In particular, it furnishes new insights into how strategic initiatives affect the new knowledge emerging from other ongoing initiatives. Highlighted in the study is how strategic initiative interactions establish connections among the distinct knowledge bases of different ongoing strategic initiatives to create new and strategic initiative driven knowledge. Furthermore, these interactions generate limitations and incompatibilities among the emerging knowledge base combinations in the context of strategic initiatives. These limitations relate to incompatibilities among the idiosyncratic knowledge bases of strategic initiatives (e.g. initiative individual sense making routines etc.) which serve specialised strategic initiative purposes in implementing a specific strategic objective of the firm. The consequence of these specialisations is that strategic initiative related knowledge bases are limited in their capacity to be combined with other knowledge bases to create new knowledge. In this regard, the study comes to the conclusion that not all the knowledge created or triggered by strategic initiative interactions is equally valuable for the firm, and that it may even become business destructive (dysfunctional). Dysfunctional knowledge may emerge from strategic initiative implementation; it may be stored in different initiative specific knowledge bases; and it may be generated by different strategic initiative interactions between the strategic initiative and the firm's organisational context or by interactions among all of the ongoing initiatives.

Another contribution of this study concerns the connection discovered between strategic initiatives related to dynamic capabilities and idiosyncratic knowledge bases. Dysfunctional knowledge within the initiative related knowledge base can turn the dynamic capabilities involved into destructive processes which iteratively generate challenges which give rise to dysfunctional effects that hamper the firm's value

creation process and its ability to renew its sources of competitive advantage. Finally, the study discusses the challenges emerging from the initiative implementation and draws up a classification of dysfunctional effects which increases the understanding of strategic initiative directed strategy making and strengthens the concept of strategic initiatives as entities able to create both business supportive and business destructive (dysfunctional) knowledge.

## 1.4 Practical relevance and contribution

Given the growing importance of successful strategic initiative implementation in management practice, this research provides guidelines on how the strategic initiative implementations can be managed professionally. This dissertation aims to provide insights and specific suggestions for practitioners. More specifically, it intends to highlight the following aspects.

Firstly, this dissertation shows that strategy making in the context of strategic initiatives requires reinforcing the management of strategic initiative related interactions with the firm's organisational context and other ongoing initiatives. Reducing the complexities of strategic initiative related interactions – especially with other ongoing initiatives – can help managers to avoid producing unexpected and negative outcomes and limiting the firm's ability to renew its sources of competitive advantage based on the interactions among ongoing initiatives. A strategic initiative may have a strategic rationale for the firm in isolation. However, the integrated perspective of different ongoing strategic initiatives may comprise inefficient interactions which give rise to business destructive outcomes in ongoing initiatives. Hence, managers need to monitor and judge ongoing and emerging interactions among strategic initiatives according to their potential range and impact.

Secondly, during their implementation, strategic initiatives develop their own knowledge bases which connect with other strategic initiative specific knowledge bases. Managers should manage these connections and knowledge base combinations by focusing their attention on potential synergies and limitations in the firm's emerging knowledge base. Strategic initiative related knowledge bases comprise

strategic and valuable knowledge which is idiosyncratic and resists being combined with the firm's other specialised knowledge, especially during strategic initiative implementation. In this context, initiative specific knowledge bases may not always be amenable to connection with other specialised knowledge bases. Synergies can turn into inefficient overlaps which may restrict the effectiveness of initiative-specific knowledge bases because every initiative-specific knowledge base is specialised in addressing a strategic rationale of the firm.

Thirdly, the managers should understand and prioritise the strategic importance of emerging knowledge across their organisation. According to the findings of this dissertation, not all the knowledge emerging from strategic initiatives is of equal strategic importance and value for the same period of time. Moreover, the knowledge emerging from the strategic initiatives may be supportive, less supportive or even dysfunctional. In this regard, this study identifies dysfunctional knowledge which can help managers to increase their understanding of irrelevant knowledge and create profiles on their dysfunctional knowledge in order to eliminate it through the prioritisation of strategic initiative implementation activities. Furthermore, the continuous prioritisation of initiative related resources may help to protect scarce firm resources and minimize the creation of ineffective knowledge.

Fourthly, the case studies presented by this dissertation highlight the fact that challenges may arise during strategic initiative implementation. These challenges must be detected at an early stage in order to prevent problematic situations from arising during initiative implementations. Two challenging situations of growing resistance, boundaries and barriers against or between ongoing strategic initiatives, and conflicting perspectives and dependencies among ongoing strategic initiatives, provide indicators for managers on initiative implementation challenges which can iteratively generate new ones. Managers must be aware of these problematic situations because they represent critical and unexpected environments for the strategic initiative implementation activities. Furthermore, if managers understand these challenges, they are able to identify problematic initiatives and decide on

activities to prevent challenging outcomes for the firm and secure the strategy implementation process.

Finally, the management team needs constantly to enhance the value creation of a strategic initiative by preventing the escalation of potential challenges from producing various dysfunctional effects for the entire company. Through challenges, strategic initiatives may give rise to dysfunctional effects (Drifting Targets, Emerging Resource Lacks, Neglect of Available Resources, Operational Complexities and Problem Multiplier) which can produce business destructive outcomes during the strategy implementation process. Furthermore, this outcome restricts the value creation of individual strategic initiatives and is a new strategic threat for the company as it implements its strategies through strategic initiatives. Therefore, constantly enhancing and energizing the value creation of ongoing strategic initiatives requires managers to perform the roles of initiative-driven explorers and innovators.

## 1.5 Outline of the dissertation

The main aim of this dissertation is to increase our understanding and to develop an integrated concept of strategic initiative related dysfunctions in the context of renewing a firm's sources of competitive advantage. The nine chapters of this dissertation are briefly outlined in the following paragraphs.

Chapter 1 ("Introduction") provides a general description of the research problem by outlining the primary research gap identified. The research objectives and scope are then presented, and the dissertation's main research question is stated. Subsequently, the theoretical and practical relevance of the study's research question and findings are outlined.

Chapter 2 ("Literature Review") conducts a comprehensive review of the literature and concepts relevant to the dissertation's research problem. The chapter begins with a review of the literature on the strategic initiative, which is the basis and unit of analysis of the study. This is followed by reviews of the resource based theory, the dynamic capability literature and the knowledge based theory of the firm. Finally, the

chapter outlines the research questions derived from an examination of the current literature.

Chapter 3 ("Research Methodology") describes and explains the dissertation's research methodology. Firstly, the methodological approach is presented, and a justification is given for its qualitative research approach, including the philosophical stance, design, and research objectives. The case study design is then outlined with regard to the preparation and data collection phases. The preparation phase comprises the case study protocol, the single case study approach, and the reflexivity of the researcher, outlining the strategies employed to avoid potential bias. The data collection phase comprises the different data collection sources, including semi-structured interviews, on-site observations and documentation, and how the researcher obtained access to the case study company. The aim is to fulfill the defined research objectives and to find answers to the derived research question by conducting the three in-depth strategic initiative case studies. The data analysis and interpretation section states how the data analysis and interpretation led to the generation of the new theory. Firstly, it illustrates the different types of coding methods used to analyse, reduce, organise and compare the data collected from the case. Secondly, it illustrates how a theory of dysfunctional effects in the context of strategic initiative implementations was generated from the data analysis, cross-case comparison and interpretation results. Finally, this section also discusses the issues of literature comparison, validation and thesis writing.

Chapter 4 ("Fieldwork: Case Study Company Overview") introduces the case company, providing background information relevant to the three in-depth case studies. This background information concerns the company's vision, mission, market presence and challenges. It also provides explanations of the company's planned strategic agenda and new business strategies. Finally, the chapter furnishes further information about the company's strategic initiatives.

Chapters 5, 6 and 7 ("Case Studies") set out the three in-depth cases: The Sun Sigma Initiative, the CRM Convergence Initiative, and the Balanced Scorecard Initiative. All

three case studies are organised into four sections. The introduction provides background information on the strategic initiative, followed by the description of its rationale, which includes the definition and vision of the initiative and its strategic objectives. The third section describes the implementation of the strategic initiative, which is divided into interactions between the strategic initiative and the firm's organisational context and interactions among strategic initiatives. The last section summarises the individual case study findings.

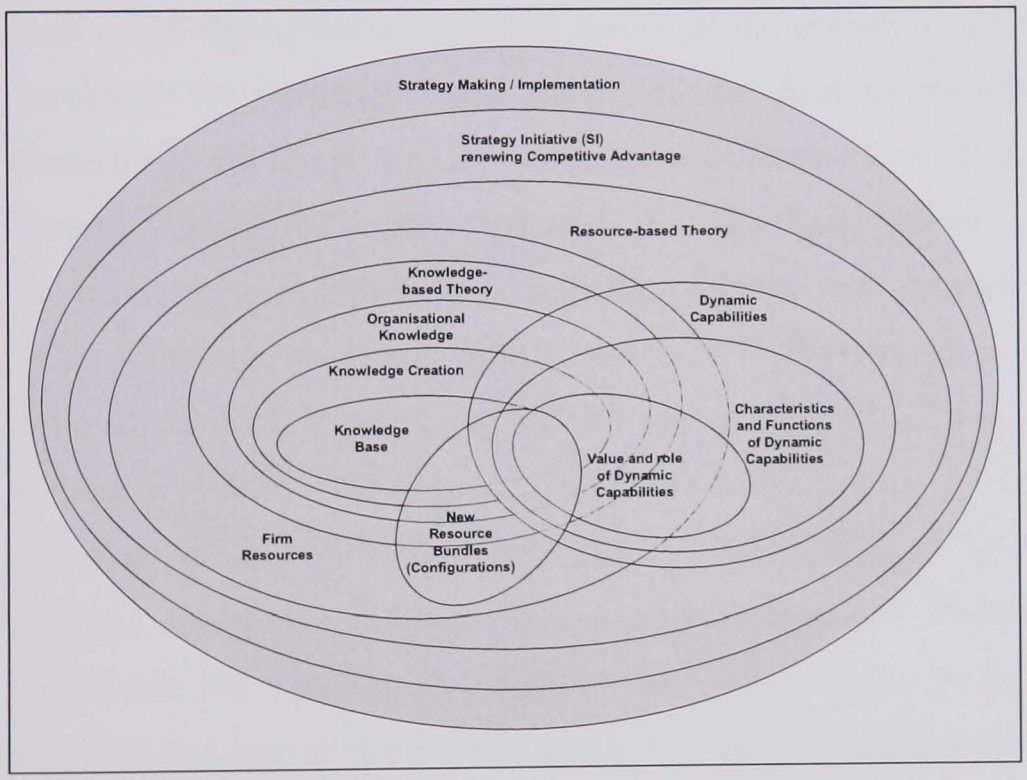
Chapter 8 ("Analysis of the Findings") is organised into three main sections. The first section outlines the main characteristics and differences, and compares the three strategic initiatives observed and analysed. The second section illustrates the interactions observed between the organisational context and other ongoing strategic initiatives, which are summarised as strategic initiative interactions. Furthermore, the section analyses, discusses and compares the challenges observed and classifies the dysfunctional effects generated by the strategic initiative implementation activities. The last part of the second section describes the strategic initiative related dysfunctions which emerged from the initiative implementations. The third and last section of the chapter focuses on theoretical reflections and discusses the findings from the strategic initiative case studies. The third section discusses the findings of the strategic initiative related interactions in the context of the resource based theory and the strategic initiative, focusing particularly on problematic aspects of combining new and existing firm resources. It then examines the drivers identified in the light of the dynamic capability concept and the theoretical debate on the challenges and dysfunctional effects. Finally, it discusses the knowledge based theory with regard to its implications for knowledge bases and the strategic initiative related knowledge creation process.

Chapter 9 ("Conclusions") concludes the dissertation from a theoretical and managerial point of view. The limitations of the study are outlined, and directions for further research are described.

# 2 Literature Review

This chapter reviews the literature relevant to this research work, and identifies and discusses the theoretical gaps and limitations. Strategic initiatives are becoming a vital source for renewing a firm's sources of competitive advantage. In this regard, to increase our understanding about the strategic initiative implementation process and their potential challenges, different main bodies of literature were selected to be reviewed: in particular, the strategic initiative concepts, the resource based theory, the dynamic capabilities literature and the knowledge based theory of the firm. Figure 1 outlines the selected main bodies of literature by outlining the interrelations among them according to the research focus of this dissertation.

Figure 1: Selected main bodies of literature.




The literature review starts with a discussion of the strategic initiative concept. The concept of strategic initiatives has been recognised as a common way to implement a firm's strategy by renewing its most valuable sources of competitive advantage, which leads to the sustainability of the firm's economic rents and above-average returns ( Peteraf, 1993; McGrath *et al.*, 1995; Lovas and Ghoshal, 2000). In dynamic and competitive environments, like the IT industry, firms have shifted more and more

from a yearly planning process to a continuous strategy development process based on strategic initiative implementations (Daft and Weick, 1984; Teece, 1984; Black and Boal, 1994; Hamel, 2000; Wielemaker *et al.*, 2001; Wielemaker, 2003). In this regard, strategic initiative implementations are faced with the challenge of remaining in the market by mobilising and renewing the firm's sources of competitive advantage; idiosyncratic resources and knowledge base (Bower, 1970; Burgelman, 1983a; Burgelman, 1991; Dunbar and Ahlstrom, 1995; McGrath *et al.*, 1995; McGrath, 2001; Marx, 2004). Therefore, affecting the firm's existing resource base to establish new and competitive bundles of resources is critical for a successful strategic initiative implementation. This leads to the debate and review of the resource based theory (Daft and Weick, 1984; Wernerfelt, 1984; Block and MacMilan, 1985; Barney, 1991; Peteraf, 1993).

Inspired by Edith Penrose's (1959) theory of the growth of the firm, scholars have developed the resource based theory of the firm to determine how a firm's competitive advantage can be understood (Chamberlin, 1933; Wernerfelt, 1984; Barney, 1986; Barney, 1991; Peteraf, 1993). The theory defines a firm's resources as the key source of competitive advantage (Bower and Christensen, 1996; Barney, 1991). However, the resource based view has the shortcoming of providing an overly static account of a firm's competitive advantage. Scholars have argued that the traditional resource based view misinterprets the notion of renewing competitive advantage (Collis, 1991; Teece and Pisano, 1994; Eisenhardt and Martin, 2000). The dynamic context of strategic initiative implementations, in particular, is not fully linked into the resource based theory on how strategic initiative implementation activities can lead to competitive bundles of resources. Furthermore, the assumption emerges that strategic initiatives require idiosyncratic dynamic capabilities successfully to implement their objectives and goals by leveraging and enhancing the existing knowledge base of a firm to establish competitive bundles of idiosyncratic firm resources. These arguments led to the decision to integrate the theories of dynamic capabilities and the knowledge based theory of the firm into the scope of the literature review.

Dynamic capabilities provide the opportunity to overcome and enhance the static nature of the RBV by providing the theoretical background to define the sources which enable a strategic initiative to transform and deploy a firm's individual resources to create and renew its sources of sustainable competitive advantage. ( Amit and Schoemaker, 1993; Teece and Pisano, 1994; Teece *et al.*, 1997; Eisenhardt and Martin, 2000; Winter, 2003). Therefore, the strategic initiative related strategy implementation approach requires initiative specific dynamic capabilities as a prerequisite for successful strategy implementations (Teece and Pisano, 1994). In this regard, the theory of dynamic capabilities also provides answers to the challenges that firms face during the process of renewing their sources of competitive advantage. Firms are highly path–dependent, and the current core capabilities relevant to a firm's current success may become traps or rigidities for its future success (Levitt and March, 1988; Leonard-Barton, 1992). Therefore, dynamic capabilities provide promising insights into renewing and sustaining the sources of competitive advantage for companies through strategic initiatives, and into why previously successful firms may fail to maintain their competitive advantages. Nevertheless, the theory lacks an explanation of how firms fail within their strategy implementations. In particular which kind of dynamic capabilities are relevant for strategic initiatives successfully to implement their objectives and goals? Moreover, strategic initiative related research has focused on the process of initiative development, rather than integrating the concept of dynamic capabilities in the context of critical resource effects that emerge during strategic initiative implementations (Bryson and Bromily, 1993; McGrath *et al.*, 1995; McGrath, 1996; McGrath, 2001; Wielemaker, 2003). The lack of theoretical background and insufficient explanations of how firms fail by using strategic initiatives are therefore apparent, and, in particular, the conceptualisation of the challenges that arise when a firm tries to renew its resources and knowledge base. In this regard, theoretical gaps emerge regarding what kind of consequences – especially resource-effects and influencing factors – occur and surround the renewal of an existing firm resource and knowledge base during the transformation into new sources of competitive advantage. Hence, the perspective that strategic initiatives develop and leverage individual dynamic capabilities to renew existing resources and extend the existing knowledge bases by combining, utilising and extending the existing

knowledge of the firm and other ongoing initiatives, leads to the fourth main body of literature: the knowledge based theory of the firm.

The knowledge based theory of the firm enriches the theoretical discussion and conceptualisation of renewing a firm's sources of competitive advantage through strategic initiatives in two main ways. Firstly, strategic initiative related dynamic capabilities facilitate the combination of new and old resources by accelerating the creation of new knowledge in the context of shaping competitive bundles of firm resources. Secondly, new and emerging knowledge from initiative implementations extends the relevant idiosyncratic knowledge base of the firm from where initiative specific dynamic capabilities iteratively utilise their knowledge. Those aspects concern the important debate on the strategic importance of knowledge as an enabler for firms, which has created a growing body of literature on knowledge in organisations (Grant and Baden-Fuller, 1995; Nonaka and Takeuchi, 1995; Grant, 1996; Spender, 1996; Eisenhardt and Santos, 2001; Patriotta, 2003). In this regard, the increasing understanding of how strategic initiatives affect a firm's individual resources and knowledge base can be enhanced through new aspects of supportive and destructive knowledge creation. New and emerging knowledge may not always be helpful in reshaping a firm's sources of competitive advantages through strategic initiatives. Therefore, the knowledge based view of the firm is necessary to explain the impacts and consequences of the emerging challenges and the effects of the resource transformation process in the context of initiative related dynamic capabilities utilising the knowledge base of the firm. Moreover, an increased understanding of the side-effects that arise during the initiative implementation process in the context of knowledge creation heightens the understanding and value of the emerging knowledge bases of the firm (including knowledge bases from other ongoing initiatives). Finally, based on the main bodies of literature reviewed and the identified theoretical gaps, the last section of this literature review describes the research questions derived from the literature review.

## 2.1 Strategic Initiatives

The concept of 'strategic initiative' concerns a progressive form of strategy making (Bower, 1970; Burgelman, 1983b; Burgelman, 1988; Burgelman, 1991; Lovas and Ghoshal, 2000; Floyd and Wooldridge, 2000; Wielemaker, 2003). Strategic initiatives can play a key role for companies in the strategic renewal process. Strategic initiatives enable firms to deploy and employ their resources, and they facilitate individual dynamic capabilities to renew a firm's sources of competitive advantage (McGrath *et al.*, 1995). They reflect the means by which a firm's management team expects to achieve its strategic goals and visions as reflected in value creation and sustainable growth (Dunbar and Ahlstrom, 1995; Lovas and Ghoshal, 2000). In this regard, successful strategic initiatives create and accumulate the new knowledge necessary to fulfil targets (Winter, 2000; McGrath, 2001; Wielemaker, 2003). The concept of strategic initiative has been given various and complementary definitions within the academic literature. A general and common definition in relation to the wide range of complementary studies in the literature is provided by McGrath *et. al* (1995, p. 13):

> *"Strategic initiatives are a principle mechanism through which organisations develop new competitive advantage"*

On this basis, various researchers have focused on specific strategic initiative aspects and different perspectives. Therefore, a broad range of possible differences within the concept of strategic initiatives has been discussed. Mintzberg and Waters (1985) distinguish initiatives between deliberate and emergent. Deliberate initiatives are characterised by processes where the development of long-term goals and action programmes reflect and prefigure the implementation of the initiative over time. Emergent strategic initiatives are developed gradually over time and merge into a coherent pattern without first being explicitly formulated (Mintzberg and Waters, 1985). Other researchers distinguish between induced and autonomous strategic initiatives (Burgelman, 1983b). Induced initiatives are part of a firm's current strategy, while autonomous initiatives lie outside the borders of the firm's current

strategy. In the light of Burgelman's (1983) classification, this thesis distinguishes between strategic initiatives that relate to the firm's top management agenda and includes deviations due to a firm's existing capabilities.

Another group of researchers relate the concept of strategic initiatives to any kind of change (McGrath, 1996; Birkenshaw, 1997; Floyd and Wooldridge, 2000). Change is the baseline and reason for the launching and driving of strategic initiatives by an executive management team. Thus, strategic initiatives are regarded as strategic change journeys aimed at initiating and driving change – sometimes radical change – across an organisation. According to some researchers, the top management generally begin with exploratory initiatives – new managers, in particular, are motivated to develop and sponsor new initiatives that are intended to drive new ideas and explore new areas. Other scholars focus on the possible outcomes of strategic initiatives, similar to the concepts of project goal achievements (Bryson and Bromily, 1993; McGrath, 2001). Initiatives enable an organisation to create and sustain a competitive advantage based on improved financial performance. Bryson and Bromily (1993) investigated how process and context factors, such as technological change, stability, communication, forcing, and problem-solving skills, directly and indirectly influence an initiative's outcome. McGrath *et al.* (1995) analysed the importance of a strategic initiative related to the range of the management team's competencies and their aptitude in planning, managing and executing initiative-relevant tasks. Yet, other researchers have examined the development of learning capabilities as a potential outcome of firms' initiatives and global programmes (Leonard-Barton, 1992; Bryson and Bromily, 1993; McGrath, 2001). McGrath (2001) reported that the goals and initiative supervisory autonomy for learning effectiveness in explorative and exploitative environments relate to the development of learning capabilities and the potential outcomes of a strategic initiative.

More recent research on strategic initiatives relates the concept to knowledge based perspectives. Strategic initiatives are the means by which a firm seeks to justify its existence and to appropriate economic value from its environment (Lovas and Ghoshal, 2000; Hamel, 2000). Therefore, successful strategic initiatives are

undertaken to create and accumulate the new knowledge that is necessary to achieve the firm's objectives (Winter, 2000; McGrath, 2001; Wielemaker, 2003). Strategic initiatives are intended to create novel insights, to establish and facilitate tests of uncommon cause-effect relationships and to retain the acquired experience. This is mostly done by performing a variety of learning activities until a satisfactory solution emerges and capability learning comes to a preliminary end (Eisenhardt and Martin, 2000; Winter, 2000). Learning activities are behavioural procedures for intuiting, interpreting, integrating, and institutionalising the knowledge needed for the successful development of new strategic initiatives (Crossan *et al.*, 1999). Strategic initiatives comprise activities through which members of different action units acquire, share, and combine knowledge into a collective product through experience with each other (Argote *et al.*, 2000). By extension, Wielemaker (2003) develops the knowledge based perspective and focuses on how strategic initiatives are conceptualised and defined. From this perspective, initiatives are processes that combine previously disconnected and emerging knowledge domains of the strategic initiative with the firm's knowledge base. The strategic initiative creates its own knowledge base over time. Therefore, initiatives are knowledge creating entities acting as alliances among independent knowledge domains within an organisation, be they individuals, teams or organisations (Weick, 1982; Chatterjee and Wernerfelt, 1991). This aspect of strategic initiatives includes the problem that initiatives may deviate strongly from an organisation's established skills and knowledge base. In this context, organisational core capabilities may change into core rigidities and hamper the progress of a strategic initiative (Leonard-Barton, 1992). Nevertheless, core rigidities represent only a minor aspect of strategy making threats because organisations in general undertake different initiatives and key programs alongside their daily business operations. This stimulates two additional assumptions. Firstly, an organisation is limited in its ability to execute strategic initiatives. Such ability relates to its capacity to create new capabilities. Secondly, initiatives face the problem of incompatibility, because a firm's knowledge base and resources have limited possibilities of being combined. In this context, this thesis proposes a conceptual definition based on the work of McGrath (2001), Floyd (2000), Chatterjee (1991), Wielemaker (2003), and Bryson and Bromily (1993): Strategic initiatives are defined

as action units initiated through new ideas and strategies with the intention of creating or renewing a firm's sources of competitive advantage. In this context, strategic initiatives are undertaken to achieve strategic (change) goals by recombining a firm's resource base and overcoming problems that arise during the recombination process.

Strategic initiatives therefore entail a certain amount of uncertainty. Initially, decisions concerning a new initiative are made on assumptions similar to project goals, rather than on well-understood relationships among the many strategic variables involved (Burgelman, 1983b; Kanter, 1983; Block and MacMilan, 1985). This uncertainty includes potential gaps, since research projects have focused more on the process of initiative development than on the resource effects surrounding initiatives or the factors influencing initiative success. Hence, the outcome that is important for this research thesis is addressing the theoretical gaps by conceptualising different resource transition effects and influential factors during the transformation of a firm's existing resource base (Huff *et al.*, 1992; Floyd and Lane, 2000). For the purposes of this thesis, strategic initiatives involve strategic processes for the renewal of an organisation's core competencies. Thus, incremental product or service changes and other, operational, initiatives or programmes that do not contribute to the firm's strategy making processes are beyond the scope of this study.

Strategic initiatives reflect the range of a firm's strategic alternatives: they coordinate smaller agendas into broader, more ambitious policies and directions (Corsi, 1992; Volberda, 2004). They are sometimes described as strategic plans in which a change in a carefully chosen area has a major and sometimes dramatic impact on the existing structures, and especially on an organisation's existing resource configurations and capabilities (McGrath, 2001). In a wider sense, strategic initiatives can be described as concepts for launching single or multiple area-impact and programme-based activities. This approach can be expanded from single non-strategic project activity which fits within a broader overall movement to a truly strategic initiative, representing a movement that pursues visionary, far-reaching, and long-term company goals based on its own organisational form, administration, and roles.

### 2.1.1 Ambiguity of Strategic Initiatives

Strategic initiatives often occur for a specific strategic reason – strategic change, repositioning of the firm, realising new business opportunities – or they result from relatively unplanned activities undertaken without particular reference to a conscious corporate strategy ("autonomous" behaviour). These characteristics mean that strategic initiatives comprise a certain degree of autonomous behaviour which constantly surrounds an initiative management team and stakeholders with ambiguity (Khanna *et al.*, 2000; Kownatzki, 2002; Zott, 2003). Hence, initiatives often occur in conditions and environments where information is either missing or difficult to interpret. Furthermore, strategic initiative related decisions and actions always include a certain amount of uncertainty and ambiguity. The assumption is that the planning and control of strategic initiatives and the related learning effects that are essential in more mature and predictive business environments for management teams become unimportant or even destructive – especially for emerging strategic initiatives. The teams and stakeholders that manage and support an initiative's progress are likely to experience gaps between the initiative's objectives and the actual results ( Kanter, 1983; Daft and Weick, 1984; Block and MacMilan, 1985; Maidique and Zirger, 1985; Dunbar and Ahlstrom, 1995). In this regard, strategic initiatives reflect what the organisation wants to do to ensure its existence and the resources that flow into a strategic initiative to realize the planned undertaking. However, additional challenges may arise from strong deviations in a firm's established skills and knowledge base, and transform the existing core capabilities into core rigidities which raise additional obstacles to the success of strategic initiatives (Leonard-Barton, 1992). Managerial oversight of new initiatives may also play a certain role (Duck, 1993; Frost *et al.*, 2002). McGrath (2001) examines the impact of managerial influence on new business projects and differentiates between goal and supervision autonomy. Goal autonomy refers to the ability of action units as strategic initiatives to set their own performance goals, while supervision autonomy concerns control exerted over operational decisions and activities by supervising the management and stakeholders. Research shows that action units with high degrees of both goal and supervision autonomy outperform more strictly led teams (McGrath, 2001). Hence, the next assumption is that strategic initiatives are difficult to plan and control. As many strategic initiatives

enter uncharted territory, repeated practices and subsequent trial-and-error processes are lacking, and the initiative requires a significant amount of learning-by-doing. Therefore, strategic initiatives are similar to journeys – journeys with limited forecasting opportunities and unexpected outcomes (Tegarden *et al.*, 1999). These outcomes are still undiscovered within the academic literature and they reflect a gap in the theory of strategic initiatives: especially on how strategic initiatives support, contribute to, and drive a firm's strategy making processes to create and sustain its competitive advantages.

### 2.1.2 Competitive Advantage through Strategic Initiatives

Strategic initiatives may produce a competitive advantage in a number of ways (McGrath *et al.*, 1995; Tushman and O'Reilly III, 1996; Floyd and Wooldridge, 2000; McGrath, 2001; Wielemaker *et al.*, 2001). Firstly, firms start their strategic initiatives in order to utilise resources already at their disposal in order to enter new market areas with lower costs and greater efficiency, or with a more competitive offer than competitors (Burke and Litwin, 1992). The global company, General Electric Financial Services, developed its financial services systems, skills and capabilities over two decades, and, through strategic initiatives, it transformed its instalment loan portfolio into a broad range of financial service offerings (Volberda, 2004). Secondly, the start-up of new strategic initiatives may relate to the intention to contribute to the firm's "absorptive capacity" (Cohen and Levinthal, 1990). In order to enter small and less challenging markets, companies are able proactively to develop new markets, products or technological assets (Burgelman, 1991; Vollmann, 1996; Baden-Fuller and Volberda, 1997). When companies like Kyocera or Sternplastic GmbH & Co. KG, making scissor blades, first entered the field of industrial ceramics, they did not only substitute steel blades. They undertook initiatives with the intention of building processes and technological assets in the long term, despite the modest profits in the first markets entered. As McGrath *et al* (1995) describe, an extension of this strategy for taking new initiatives is the simultaneous pursuit of numerous products, markets, and technologies with modest investments in any given effort. This approach relates closely to the concept of the "option" strategy (Bowman and Hurry, 1993). Therefore, the concept of strategic initiatives enables firms to choose the strategic option that is

best suited to them and realise it through the execution of the strategic initiative. Thirdly, firms sometimes create a new source of competitive advantage through chance. The famous "Post-It" note produced by the 3M Corporation provides an example of an organisation which actually possessed an attractive combination of proprietary assets, but only recognised and capitalised on those assets after a considerable delay. However, the ambiguity of new initiatives relates to the idea of change in the existing business environments. As Richard P. Carlton, the former 3M CEO in 1950, said: *"You're right, our Corporation stumbled over new products, but you shouldn't forget that you can stumble over something if you move"* (Szamosi and Duxbury, 2002, p.24). The statement comprises some of the core characteristics of strategic initiatives. In order to change the existing and well-established resource configurations, the initiative must be deliberate and emerge over time without a linear and designed plan. In extension, strategic initiatives are journeys with unpredictable outcomes. Their results may be business-supportive, as illustrated by the "Post-It" example, or they may be business-destructive. Hence, strategic initiatives include a certain degree of unpredictable power and dynamic effects for an organisation.

Finally, the concept of strategic initiative entails that all rent-generating competitive advantages will erode over time (Vollmann, 1996; Wielemaker *et al.*, 2001). This is where strategic initiatives address the key problem for strategists: supporting and managing the development of new sources of competitive advantage by replacing or changing those resources and capability configurations which are no longer able to yield rent. According to Bargeman's (1988) concept of retrospective rationalisation, competitive advantages are only recognised retrospectively after a strategic initiative has been launched and executed. Hence, to use the terms of the resource based theory, the "distinctive competencies" that will be generated through a strategic initiative are often not known at the beginning (Kelly and Amburgey, 1991). Nevertheless, the retrospective view plays an important role in discovering and developing new competitive advantages by reflecting the somehow unpredictable path and outcomes of an initiative journey. The unpredictable path is often characterized, problemtized and complicated by a resistance from various stakeholders. Due to its importance, the

following section will discuss various challenges which can potentially emerge during the implementation of strategic initiatives.

### 2.1.3 Strategic change initiative implementation problems

Implementing changes through strategic initiatives includes the risk of failure. Corbett *et al.* (2007) found that at least a third of new product development initiatives failed and suggest the importance of learning from those failed initiatives. According to them, termination can occur in three different ways. Firstly, it is called undisciplined termination, which indicates a quick decision to "kill" a project or initiative without considering its possible learning opportunities. Secondly, it is called strategic termination, as it occurs when the overall objective of a strategic initiative is no longer aligned with the firm's strategic goals. Therefore, initiatives can be terminated due to their strategic values. Thirdly, initiatives can be terminated through innovation drift which reflects the tendency to allow initiatives to continue even though the outcome of the innovation is no longer in line with the aim of the firm. In other words, these projects continue without any potential to serve the firm's strategic goals.

Basically, all three types of initiative failure offer some valuable learning opportunities (Corbett *et al.*, 2007). However, fully to articulate the learning opportunities will require a deep understanding of the issues and dynamics that led the project to fail in the first place. Moreover, in addition to the understanding of failed projects, they also argue the importance of unravelling how top performing firms handle their constant challenges through balancing between the type and number of initiatives. In order to maintain this optimal balance, it is vital to understand how ongoing initiatives interact with each other.

Another group of scholars conceptualised resistance as an important resource for change and providing additional insights on challenging implementation aspects (Ford *et al.*, 2008). In their context, resistance is an irrational and dysfunctional reaction of the change recipients and a function of the quality of the relationship between the change agents and recipients. In particular, change oriented initiatives can face

resistance from the change recipients, triggered by the top management and decision makers acting as the change agents of the organisation. Hence, the top management and decision makers acting as change agents can cause resistance for change initiative implementation and lead to implementation challenges.

Another aspect of initiative implementation problems relates to the interactions that an ongoing change initiative undergoes during their implementation. In particular, strategic change initiatives are creating situations within organisations that interrupt the normal patterns of an organisation and calls for participants to enact new patterns, involving the interplay between deliberate and emergent processes that can be highly ambiguous (Mintzberg and Waters, 1985; Dent & Goldberg, 1999). These interactions between ongoing initiatives or interactions between the initiative and the organisational context may stimulate implementation problems as resistance to change. In particular, managers and decision makers can break agreements with the wider audience of the organisation (the recipients) during the initiative implementation period and facilitate the loss of trust, which can raise problems during the change implementation process (Cobb *et al.*, 1995; Andresson, 1996; Warnous and Austin, 1997). Another change implementation problem relates to the breakdown in communication; the top managers and decision maker can stimulate resistance through communication breakdown, such as failing to legitimise the change initiative, misrepresenting its chances of success and failing to call people to action (Ford *et al.*, 2008). Nevertheless, the scholars leave the issue unresolved on how the emerging resistance between the agent-recipient relationships affects the implementation processes of the change initiatives. Hence, conceptualising the emerging dysfunctions from strategic change initiative implementation provides the opportunity to increase the understanding of the potential impact from upcoming change resistance and their challenging outcomes.

### 2.1.4 Managerial Context of Strategic Initiatives

In general, strategic initiatives can be classified into two major types. The first type of strategic initiative is generally explored, described and initiated by the top management team (top-down). From there, the initiative flows are a second stage for

the implementation teams across the organisation (Selznick, 1957; Chandler, 1962; Geletkanycz and Hambrick, 1997). The second type of strategic initiative flows from the daily business operation team, which attends to the initiative's exploration and definition for the top management teams (bottom-up). These types of initiative can be characterised as making sense of new and emerging ideas, facilitating strategic decisions and actions and legitimizing the new journey (Bartlett and Ghoshal, 1989; Kanter, 1999). In this regard, the firm's organizational form, decision structure and hierarchy influence the shaping and launching of new top-down or bottom-up strategic initiatives at an early stage (Wielemaker *et al.*, 2001; Wielemaker, 2003). However, progressive, radical and globally oriented strategic initiatives may not reflect a typically hierarchy-related, top-down or bottom-up, one-directional approach. Instead, this kind of strategic initiative follows more interactive and deliberate paths across a company's organizational hierarchies, departments and levels (Rajagopalan and Spreitzer, 1996). Hence, the interrelations across the different management levels represent a challenge of complexity for a strategic initiative. Furthermore, besides the interrelations with the organizational context, a strategic initiative faces additional complexities due to the interrelations with other ongoing initiatives. Strategic initiatives may have to overcome those obstacles to achieve their goals and objectives. The assumptions are, firstly, that the interrelations between the strategic initiatives are a potential source of complexities in the areas of sense making, resource allocation and decision structures, and, secondly, that inefficiencies may arise out of the complexities of the interrelations which impact on the performance and results of strategic initiatives.

A group of researchers have found that the degree of organisational embeddedness relates to the success of a strategic initiative, because the benefits increase at lower levels and the costs increase at higher levels of organisational embeddedness of a strategic initiative (Lechner *et al.*, 2003; Marx, 2004). These researchers discuss the dependencies and ties between the strategic initiative defined by the action units and other related action units within the company network, such as the organizational units, departments, and teams. Their discussion is based on the idea that strong ties create a large number of relations with other organizational units, so that an action

unit can more efficiently develop the information and knowledge base associated with a strategic initiative (Wielemaker *et al.*, 2001; Marx, 2004). The debate also concludes that strong ties with the rest of the organization are likely to increase the action unit's connections with the key stakeholders, which enhances the strategic initiative's perceived desirability and acceptability within the organization. Nevertheless, these authors neglect the aspect of unexpected outcomes and results – dysfunctional effects – due to strategic initiative actions and the interrelations between the initiative and the organizational context, and between the initiative and other ongoing strategic initiatives. Furthermore, the discussion of embeddedness has the shortcoming of being too unilateral. A larger amount of relations between the strategic initiative action unit and other company-related action units certainly generates a higher level of information flow and knowledge creation. Nevertheless, the discussion of the knowledge emerging from strategic initiative implementation is unresolved. The assumption is that the knowledge created may not always be helpful for, compatible with, or supportive of the initiative's progress and the aim of renewing a firm's knowledge base. Hence, an increasing number of interrelations between the strategic initiative action unit and other company-related action units may be problematic and raise obstacles which hamper the initiative's progress and produce unexpected side effects.

### 2.1.5 Discussion of the Strategic Initiatives Concept

According to McGrath *et al* (1995), competitive advantage is unlikely to emerge from a strategic initiative unless its responsible entities are able to develop capabilities in what they are doing. These capabilities are often outcomes and new combinations of firm-specific resources, which enable the organisation to accomplish its task of moving in the desired direction (Teece *et al.*, 1997). Hence, in order to increase the probability that a new competitive advantage will be created by strategic initiatives, companies must focus and manage the convergence between an initiative's objectives and its results. Therefore, the assumption is that companies are limited in their ability to execute strategic initiatives. Various scholars maintain that an initiative's success relates to its organisational embeddedness (Uzzi, 1996; Soda and Usai, 1999; Gargiulo and Benassi, 2000; Chung *et al.*, 2000). However, they fail to answer the

question regarding which kind of effects emerge and how an organisation can overcome these challenges. Moreover, the next assumption is that initiatives create incompatible resource reconfigurations. These new configurations face new challenges alongside the organisational ones. Hence, single initiatives may generate value for an organisation, but several ongoing strategic initiatives may disturb, limit and inhibit each other in different areas and ways to achieve their objectives, creating value for the overall company. In this regard, increasing ties with other strategic initiatives may heighten the complexities and create new knowledge or information within the single initiative action unit that may be critical to the progress and success of other initiative action units. In detail, the complexities faced by a strategic initiative are related to the different surrounded and detached action units of an organisation. Those action units provide the initiative's action unit with a great deal of diverse information, which induces the initiative to focus too closely on exploration at the expense of enhancing existing capabilities (Koka and Prescott, 2002). Therefore, access to different strategic initiative action units and interests increases the risk of causing confusion within an individual strategic initiative, thus leading to ineffective and inefficient action. Especially if the interests are heterogeneous or even contradictory, it is difficult or even impossible for the single strategic initiative to decide which information and interests are trustworthy and supportive for success, so that ineffective actions and side-effects may ensue. The level of confusion increases and additional conflicts arise within the initiative's unit, reducing the efficiency of the latter. Moreover, higher and stronger levels of relations between strategic initiatives stimulate the dynamism of new knowledge across the different initiative action units and may create or additionally stimulate unforeseeable outcomes and effects which diminish the success of individual initiatives.

The next consideration concerns the uncertainty and unpredictable nature of strategic initiatives, which often occur with a specific strategic reason within a company. These undertakings imply that strategic initiatives are similar to journeys, which have a certain degree of uncertainty and unpredictability in outcomes, because strategic initiatives operate in conditions and environments where information is either missing or difficult to interpret. In this context, the planning and controlling of strategic

initiatives are limited and may require a different approach by the management team. As many strategic initiatives enter uncharted territory, repeated practices and subsequent trial-and-error processes are lacking, and the initiative requires a significant amount of learning-by-doing. Hence, ongoing dynamics influence the progress and success of strategic initiatives either in the context of an initiative's organisational environment or in the context of other ongoing initiatives. These dynamics may create different outcomes and effects, as new knowledge becomes counterproductive for the success of a strategic initiative. The acquisition of a greater understanding on how strategic initiatives impact on the existing resource configurations and a firm's capabilities provides an opportunity to detail and enhance the strategy making process of firms with additional theoretical insights, especially with regard to how a new competitive advantage can be developed and scarce company resources be better invested and reallocated.

## 2.2 Resource Based View of the Firm

Over the last decade, a large and diverse body of studies has discussed a firm's competitive advantage. In this regard, the resource based view (RBV) of the firm provides indications about how companies may be able to understand their individual sources of competitive advantage as a baseline for renewal (Penrose, 1959; Barney, 1991; Peteraf, 1993). In relation to the strategy making process, the term "competitive advantage" has been best defined by Barney (1991, p. 102), who wrote as follows:

> *"A firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy".*

Until the late 1980s, the resource based view was characterised by a rather fragmented process of development. The earliest acknowledgement of the potential importance of firm-specific resources is to be found in the work of economists (Chamberlin, 1933;

Robinson, 1933) and was subsequently developed by Penrose (1959). Rather than emphasising market structures, these economists highlighted firm heterogeneity and argued that the unique assets and capabilities of firms were important factors in growth (Penrose, 1959). For example, Chamberlin (1933) identified some of the key capabilities of firms as technical know-how, reputation, brand awareness, the ability of managers to work together and the ability to create particularly patents and trademarks, of which many have been re-examined in the recent strategic management literature (Hall, 1992; Day, 1994). These path breaking findings generated a large body of research. In order to aid understanding of the levers of competitive advantage, this research can be classified into three main strands. The first describes how managers drive the development and deployment of a firm's resources (Barney, 1986; Schoemaker, 1992; Amit and Schoemaker, 1993; Barney and Zajac, 1994; Lei and Bettis, 1996). The second strand focuses more on the scope of the firm and on the relationships between resources (Prahalad and Hamel, 1990; Chatterjee and Wernerfelt, 1991; Robins and Wiersema, 1995; Markides and Williamson, 1996; Williamson, 1999). The third has sought to identify and develop concepts which reflect how a firm's sustainable competitive advantage can be understood (Daft and Weick, 1984; Mahoney and Pandian, 1992; Black and Boal, 1994; Eisenhardt and Martin, 2000). All of these research streams have at least one feature in common: all of them have been in some way inspired by Edith Penrose's (1959) theory of firm growth.

### 2.2.1 Historical context of the RBV – Penrose Influence

There is no doubt in the academic world that Edith Penrose influenced numerous research projects in the field of resource based theory. Various scholars, such as Wernerfelt (1984) and Teece (1982), cited Penrose in their early papers. Penrose's brilliant insights into discontinuous growth, collective learning, the discovery of productive opportunities and the creation of impregnable knowledge bases have inspired the development of various components in the resource based models. For Penrose, the firm is a pool of resources organized within an administrative framework. To explain the growth of the firm, Penrose developed a process view of production and competition which enabled her to conceptualize the distinctions

between resources and productive services and between productive services and productive opportunities. In this context, Penrose incorporated knowledge and technology into a dynamic theory of enterprise growth. Within Penrose's model, known as the "Penrosian Firm", the firm strategically shapes the market rather than reacting passively to it, but does so within a moving, historically contingent environment. Firms address upcoming productive opportunities in different ways. They consequently develop and use innovative processes, for example strategic initiatives, which re-characterize the parameters (products, organizations, technologies) of the market and growth. Of relevance to this research work, Penrose's (1959) main intellectual contributions can be summarized in two aspects: Firstly, Penrose created the perspective from which the firm may be viewed as a collection of resources; and, secondly, she showed that an optional pattern of expansion may exist which requires a balanced use of internal and external resources in a particular sequence.

### 2.2.2 Concepts of Firm Resources

The resource based perspective starts from the assumption that the desired outcome of managerial effort within the firm is a sustainable competitive advantage (SCA). Achieving an SCA enables the firm to earn economic rents or above-average returns. In turn, this focuses attention on how firms achieve and sustain advantages. The epicentre of SCA can be identified as firm-specific resources. Following Teece *et al* (1997, p. 511), resources are defined for this research work as:

> *"Firm-specific assets are difficult if not impossible to imitate. Such assets are difficult to transfer among firms because of transactions costs and transfer costs and because the assets may contain tactic knowledge".*

In addition, those resources can be heterogeneously distributed and connected across firms as different resource configurations, and resource differences persist over time. Barney (1991) classified resources into three categories: firstly, physical capital resources which include the physical technology used in a firm, a firm's plant and

equipment, its geographic location and its access to raw material; secondly, human capital resources, including training, experience, judgement, intelligence, relationships, and the insights of the individual managers and workers in a firm; and, thirdly, organizational capital resources, described as a firm's formal reporting structure, its formal and informal planning, controlling and coordinating systems, as well as informal relations among groups within a firm and between a firm and those in its environment. Grant (1991) described six different categories of firm resources: financial, physical, human, technological, reputation and organizational. Furthermore, together with the resource categories described, the term 'resources' is very often given a general and all-embracing definition within the literature.

Over time, various definitions of the term 'resources' have emerged. Moreover, several researchers began to describe companies as bundles of resources (Daft and Weick, 1984; Block and MacMilan, 1985; Teece *et al.*, 1997). In detail, different types of resources can be connected to each other in different ways, so that they reflect to different kinds of resources structures within a firm: the so-called 'bundles of resources'. Table 1 summarises the different types of resource bundle schemes used in the literature.

Table 1: Different Concepts of Firm Resources.

| **Theorist** | **Tangible Assets** | **Intangible Assets** | **Capabilities** |
|---|---|---|---|
| Wernerfelt (1989) | Fixed Assets | Blueprints | Cultures |
| Hall (1992) | | Intangible Assets | Intangible Capabilities |
| Hallo (1993) | | Assets | Competencies |
| Prahalad and Hamel (1990) | | Core Competencies | |
| Itami (1987) | | | Invisible Assets |
| Amit and Schoemaker (1993) | | | Intermediate Goods |
| Selznick (1957); Hitt and Ireland (1985); Hofer and Schendel (1987) | | | Distinctive Competencies |
| Irvin and Michaels (1989) | | | Core Skills |

Tangible assets are the current physical assets within the organization which have a fixed long-run capacity (Block and MacMilan, 1985). Tangible assets include property of ownership which, contrary to intangible assets (Hall, 1992), are relatively easy to measure, usually through the balance sheet valuation of companies. Another feature of tangible assets is that they are transparent and the barrier against duplication by the competitors is low (Grant, 1991). In general, the kinds of resources termed tangible assets are relatively imitable and substitutable.

Intangible assets include such intellectual property as trademarks and patents, as well as brand and company reputation and company networks (Hall, 1992). Intangible assets can be observed in the difference between the balance sheet valuation and stock market valuation of public quoted companies, as for example in the pharmaceutical sector, where patents are business critical (Grant, 1991; Rumelt, 1991). Therefore, the capacities of intangible assets are unlimited and firms can leverage their value within the market, rent them (e.g. license) or sell them (e.g. selling intellectual property rights) (Block and MacMilan, 1985). Barriers to duplication are higher than in the case of tangible assets. Dierickx and Cool (1989) describe intangible assets as asset stocks like networks and reputation. These assets are relatively difficult to imitate or substitute by competitors in the short run. Hence, intangible assets are a stronger source of SCA.

The third group comprises capabilities, which are often described as invisible assets (Itami, 1987) or intermediate goods (Amit and Schoemaker, 1993). Capabilities are people skills, cultural strengths, and organizational routines, interactions through which all the company's resources are coordinated and allocated (Grant, 1991). Capabilities are difficult to evaluate, and they provide limited capacities in the short term, because allocating learning and coordinating change creates difficulties for a company or organisation (Block and MacMilan, 1985). These limitations in the capacities of a firm's individual capability are difficult in the long term (Block and MacMilan, 1985). In comparison to the tangible and intangible assets, this group of resources may have dynamic aspects, the so-called 'dynamic capabilities'. These kinds of capabilities are, for example, the firm's ability to integrate, build and

reconfigure internal and external competences in order to address the rapidly changing environments by leveraging the competitive firm resources. Therefore, the primary value of this group of resources may not relate to being a source of competitive advantage. The primary value of the dynamic capabilities for a firm relates to their ability to reconfigure the existing resources to renew their competitive advantage.

In summary, the resource concepts described provide important foundations for this thesis. Firm resources can comprise all types of tangible and intangible assets, capabilities, organizational processes, firm attributes, information and knowledge controlled by a company. In this context, and further to Rugman's (2001) analysis, there are some general resource characteristics. Firstly, the firm's fundamental objective in a resource based approach is to achieve sustained, above-normal returns, compared to its rivals. Secondly, unique bundles of resources can become the drivers for above-normal returns. Thirdly, innovations through new resource configurations, company-internal or a mix of internal and external resource configurations, can substantially contribute to generating sustainable company returns; and, fourthly, capabilities and competencies can be described as specific types of resources with a strong impact on a firm's source of sustained competitive advantage and its individual performance. All four of these characteristics reflect the concept of firm resources. Nevertheless, the RBV has a number of theoretical shortcomings that have emerged in relation to such research which can be summed up in the following three aspects. Firstly, the different resource categories, including the classifications by Barney (1991) and Grant (1991), fail to describe how the different resource groups and categories relate to the renewal process of a firm's competitive advantage and individual abilities to create above-average rents. Secondly, although the different resource concepts may help companies to understand where to start leveraging firm specific resources and resource types, they do not increase understanding on how to reconfigure the existing resources to establish new resource schemes and structures, and on what kind of challenges relate to these reconfiguration processes. Thirdly, resource schemes within firms differ in their importance as sources of a firm's SCA.

Resources are scarce, and they may resist being reconfigured with other resources to establish new resources schemes as a source of SCA.

### 2.2.3 Resource Transformations through Strategic Initiatives

In order to turn the existing company resources into valuable resources as a source of new competitive advantage, firms can focus their strategic initiatives on two different perspectives. One perspective of SCA is incorporated into customer value - gaining a competitive advantage by providing greater value to customers - can be expected to lead to superior performance measured in conventional terms, such as market-based performance (e.g., market share, customer satisfaction) and financial-based performance (e.g., return on investment, shareholder wealth creation) (Bharadwaj *et al.*, 1993; Hill and Jones, 1995; Hunt and Robert, 1995). Another perspective of SCA concerns differentiation. Some theorists have argued that market-share and profitability are both outcomes of the efforts by firms to secure costs and to provide differentiation advantages (Buzzell and Bradley, 1987; Jacobsen, 1988; Aaker, 1989; Kotler, 1994).

Both ways of creating competitive advantage can be achieved through the successfully launched and implemented strategic initiatives. According to the RBV, successfully executed strategic initiatives need to reconfigure a firm's existing resources in a way that the new resource configuration reflects specific attributes; attributes which designate them as the new sources of SCA. The RBV maintains that, through strategic initiatives, a firm can establish new sources of SCA if the new resources and resource configurations have specific attributes which are valuable, rare, inimitable and not substitutable (Teece, 1982; Barney, 1991). In this regard, resources can be defined as units which provide space and the potential capacity to determine a firm's competitive advantage. Moreover, those resources can be surrounded by different kinds of relationships. These so-called 'cogency relationships' (Black and Boal, 1994) may have different characteristics and connections with different types and levels of other resource networks. Therefore, firms implementing strategic initiatives are faced with the challenge of creating specific resource attributes within the reconfigured and new networks of

interconnected firm resources. Furthermore, according to the RBV, strategic initiatives are required to create new resource configurations which are not easily duplicated by a firm's competitors. If a firm creates, through its strategic initiatives, new resource configurations which cannot easily be duplicated by a firm's competitor, SCA can be achieved and gives rise to both an increase in the firm's customer value and a stronger level of differentiation. However, explaining the results of strategic initiative transformations to establish barriers of resource duplication for a firm's competitors is complicated by an inconsistent and, at times, conflicting use of terminology. There are several overlapping concepts that strategic initiatives can apply in the context of renewing a firm's sources of competitive advantage, including asset stock accumulation (Dierickx and Cool, 1989), capability gaps (Coyne, 1986), capability differentials (Hall, 1992), ex-post limits to competition (Maidique and Zirger, 1985), isolating mechanisms (Rumelt, 1984; Rumelt, 1991; Mahoney and Pandian, 1992), uncertain inimitability (Lippman and Richard, 1982), and causal ambiguity (Reed and Robert, 1990). Table 2 illustrates the concepts overlapping in the theoretical RBV literature.

Table 2: Alternative Concepts of Barriers of Resource Duplications

| **Authors** | **Barriers to Resource Duplication** |
|---|---|
| Coyne (1986) | Business System Gaps, Managerial Gaps, Position Gaps, Regulatory Gaps |
| Dierickx and Cool (1989) | Asset Erosion, Asset Mass Efficiencies, Causal Ambiguity, Interconnectedness of Asset Stocks, Time Compression Diseconomies |
| Hall (1992) | Cultural Differentials, Functional Differentials, Positional Differentials, Regulatory Differentials |
| Lippman and Rumelt (1982) | Uncertain Inimitability |
| Reed and DeFillippi (1990) | Complexity, Tacitness and Specificity |
| Rumelt (1984; 1991) * Mahoney and Pandian (1992) | Communication Good Effects, Economies of Scale, Information Impactedness, Producer Learning, Reputation, Response Lags, Isolating Mechanisms |

*Note that some of Rumelt's isolating mechanisms have been omitted because they are external to the firm. Advertising and channel crowding are industry conditions. Buyer evaluation costs and buyer switching costs are industry features.

Transparency can be used across the different types of barriers against resource duplication to explain the concept (Grant, 1991). The main problem that a competitor may have is an information problem whereby the competitor is unable to identify the reasons for a given firm's success because the strategic initiative insights, results and upcoming side-effects are not transparent. If the competitors are unable to imitate a firm's resources and resource configurations through their strategic initiative related transformations, the latter will be able to achieve superior returns and SCA. Mahoney and Pandian (1992) have added a further barrier to resource duplication which takes the form of rent generation, as outlined in the following statement:

> *"The crucial aspect for competitive advantage involves the productive services of rent-generating resources combinations which cannot be easily imitated or substituted"* (Mahoney, 1992, p.11)

The statement implies that competitive advantage can be measured through changes in rent-generation. However, Penrose (1959), for example, did not view the intentional creation of isolating mechanisms and rent generation as a worthwhile endeavour, nor did she even assume this to be crucial for understanding the growth of firms. Empirical data show that the world's largest 500 multinationals do not earn rents over time (Rugman, 2000). The micro-level goal of efficiency-based rent creation is now undoubtedly a key objective for most multinational companies. Hence, firms are faced with the challenge of launching new strategic initiatives to discover new ways of building efficient barriers to resource duplication. However, this undertaking includes the challenge that strategic initiatives always comprise a certain amount of uncertainty and ambiguity. Strategic initiative management teams and related stakeholders are constantly surrounded with ambiguity, and the problem of not being able to make clear adjustments due to managerial decisions to improve future initiative related resource re-configuration results. This problem relates to the RBV concept of causal ambiguity. Various RBV researchers have pointed out an ambiguity concerning the connections between actions and results. Causal ambiguity not only prevents managers in other firms from understanding the link between

resources and performance in the local firm; its effect is also that there is a certain amount of ambiguity among managers within the same firm regarding their understanding of the causal connections and links between results and actions. Therefore, causal ambiguity can be used to establish barriers to resource duplication. However, this implies that, if the effect takes place, then successful managers are unsure about what they are doing right and how precisely a strategic initiative should be launched and implemented to achieve the expected results. If successful, the managers are unsure about what they are doing right, so causal ambiguity prevents the competitors from understanding the source of a firm's success, and it challenges the same firm to develop knowledge and learn from experience (e.g. previous managerial decisions) about how success can be achieved through the reconfiguration of their resources (Reed and Robert, 1990).

Besides causal ambiguity, Lippman and Rumelt (1982) put forward a very similar concept of "uncertain inimitability". Uncertainty relates to the factors responsible for superior company performance, and it explains the efficiency differences between both incumbents and potential new entrants, despite the free entry. Uncertain inimitability can be facilitated through ongoing strategic initiative related resource re-configuration activities and positively impact on a firm's rent performance, even if the firm is deploying atomistic prices, so that it derives specific market power or restricted market entry (Lippman and Richard, 1982).

### 2.2.4 Discussion of the RBV

As a consequence of the different research priorities and overlapped research streams of different theoretical concepts within the RBV, the theory includes challenging and sometimes controversial aspects. For example, Penrose had an inherent bias against profits that would primarily benefit shareholders and lead to high dividends, rather than to reinvestment in the firm's growth (Rugman and Verbeke, 2001). Contrary to Penrose, other researchers extended the RBV with core concepts, such as maximising profits by establishing sustainable rents (Chatterjee and Wernerfelt, 1991; Foss and Knudsen, 2003; Peteraf and Barney, 2003). Those overlapping and sometimes controversial research streams have given rise to the following difficulties and

theoretical limitations, in the context of strategic initiatives and the strategy making process. The theory became increasingly complex, including the different concepts and definitions of firm resources (e.g. Table 1 and Table 2). These overlaps may produce uncertainties within the strategic initiative implementation by transforming relevant key resources and establishing new configurations during the strategy making process. In detail, researchers like Barney (1991) and Grant (1991) have provided theoretical schemes and classifications for use in describing resources. Nevertheless, there is less clarity on how these resource classifications relate to the renewal of competitive advantage through the RBV. Resources are scarce and resist being recombined between different types, with the emerging assumption that these recombination possibilities may include difficulties and threats for a firm. The RBV does not provide perspectives on processes; rather, it provides a more static view, which leads to the next difficulty and theoretical limitation. The theory is criticised for its overly static view of the firm. There is some agreement among theorists that the traditional RBV misidentifies the focus of long-term competitive advantage in dynamic markets (Teece *et al.*, 1997; Eisenhardt and Martin, 2000). Through the RBV, no adequate explanation is possible on how and why certain firms have a competitive advantage in situation of rapid and unpredictable change – and especially in changing environments where the competitive landscape is shifting and new competitive advantages emerge. Hence, the RBV has limitations and theoretical gaps in adequately conceptualising and explaining a firm's dynamic strategy implementation process. In particular, the ways in which a firm's unique resources can be reshaped through strategic initiatives are insufficiently conceptualised because of the resource based theory's excessively static view, and require further conceptualisation and explanation.

The RBV's discussion on causal ambiguity or uncertain inimitability and differentiation through barriers to resource duplication gives rise to the proposition that competitive advantage can be shaped by a firm's strategic initiative if the initiative's actions and transformational results lead to a firm's unique resources, capabilities and competencies. This proposition highlights two further difficulties and limitations of the RBV in relation to this thesis. Firstly, reshaping a firm's unique

resources involves the argument that resource configurations are firm individual and relate to the source of a firm's heterogeneity (Winter, 2003; Hoopes *et al.*, 2003; Foss and Foss, 2004). Described as the idiosyncratic competences of firms, heterogeneity is often viewed as the source of and limitation on economic rents. Hence, reshaping existing resource configurations encounters limitations on creating competitive firm resources, because in some way firm individual resources, capabilities and competencies are the source of a firm's heterogeneity. The dilemma for strategic initiatives is how to identify and protect a firm's idiosyncratic competencies by implementing relevant transformations and driving resource re-configurations at the same time. Secondly, heterogeneity is closely linked to a company's history. The resource configurations and characteristics of any firm will be the result of the firm's specific history and the path that it is following. Therefore, creating competitive firm resources is highly path dependent, with the consequence that strategic initiatives and their relative stakeholders may encounter ambiguities and limitations when defining actions to reshape their existing resource configurations (Makadok, 2001). Thirdly, the RBV maintains that companies have ambiguities and limitations in their understanding of how to define actions to reshape their existing resource reconfigurations. Therefore, strategic-initiative related activities and transformation to reconfigure firm resources comprise the challenging aspect of unpredictability. Hence, additional aspects in a dynamic perspective of reconfiguring firm resources may be helpful in overcoming the overly static view of the RBV.

The above discussed theoretical gaps and the overly static view of the firm do not provide a comprehensive theoretical basis on which to conceptualise and explain the dynamic perspective on how strategic initiatives impact and reconfigure existing resource configurations to renew a firm's SCA. Moreover, the process of recombining resources through the dynamic concept of strategic initiatives may include the boundaries, barriers and difficulties which cannot be explained by the concepts the RBV and lead to the more dynamic perspectives of the dynamic capability theory.

## 2.3 Dynamic Capability Theory

The resource based view became a major paradigm within strategy research, based on the increased relevance of a firm's competitive advantage. Nevertheless, the focus of this research work and the limitations of the RBV provoked various criticisms regarding its lack of a dynamic dimension, such as the renewal of competitive advantages. Scholars started to enhance the concept of competitive advantage by adopting a dynamic perspective of rapid and unpredictable change (Eisenhardt and Martin, 2000). In this context, researchers sought to overcome the limitations of the excessively static RBV and developed the dynamic capability theory. Eisenhardt and Martin (2000, p. 1112) provide the following definition of dynamic capabilities as facilitators to create competitive advantage for a firm:

> *"The firm's processes that use resources – specifically the processes to integrate, reconfigure, gain and release resources – to match and even create market change".*

Dynamic capabilities are thus *"...the organisational and strategic processes and routines used by a firm to facilitate and achieve new resource configurations as markets emerge, collide, split, evolve, and die..."* (Eisenhardt and Martin, 2000, p. 1113). Therefore, dynamic capabilities relate to a firm's capacity to deploy resources. Amit and Schoemaker (1993, p. 35) extend the definition of dynamic capabilities thus:

> *"...Information-based, tangible or intangible processes that are firm-specific and are developed over time through complex interactions among the firm's resource. They can abstractly be thought as "intermediate goods" generated by the firm to provide enhanced productivity of its resources, as well as*

*strategic flexibility and protection for its final product or service."*

This is very close to the definitions provided by Grant (1996) and Pisano (1994), who state that dynamic capabilities are antecedent to (precede) the organisational and strategic routines by which managers alter their resource base – acquire and shed resources, integrate them, and recombine them – to generate new value-creating strategies.

The dynamic capability theory (DCT) emerged in the 1990s and enriched the RBV with dynamic perspectives. Moreover, dynamic capabilities were applied mainly in explanation of a firm's competitive advantage. The DCT furnished additional insights into the sources of a firm's competitive advantage by introducing the processes by which a firm's competitive advantages are dynamically renewed. In this regard, Teece, Pisano and Shuen (1997) produced what is generally regarded as the seminal paper on the dynamic capability approach. Their study on the dynamic capability approach conceptualized an ability of a firm to alter their resource configurations by applying certain capabilities and thereby adapt to changing environments through renewal of their competitive advantages. Furthermore, Teece et al. (1997) emphasised two key aspects; *"dynamic"* and *"capability"*. The term 'dynamic' refers to a firm's capacity to renew its competencies in order to achieve a match with the changing environment. The term 'capability' refers to the key role of strategic management and its initiatives for the optimal adaptation, integration, reconfiguration of internal and external organizational skills, resources, and competencies in order to fulfil the requirements of a changing environment.

Influenced by the dynamic capability approach, several researchers started to incorporate the importance of dynamic capabilities into a major strand of research on strategic management (Nelson and Winter, 1982; Collis, 1994; Teece *et al.*, 1997; Eisenhardt and Martin, 2000; Winter, 2003). However, alongside the DCT there arose a large body of research and theoretical debate on dynamic capabilities, most notably as conducted in the following two studies: "Dynamic Capabilities: What are They?"

(Eisenhardt and Martin, 2000) and "Understanding Dynamic Capabilities" (Winter, 2003). Nevertheless, a lack of empirical data intensified the general confusion, and the need to increase understanding on dynamic capabilities still predominated. Researchers continued to criticize the RBV and the DCT for failing to provide robust and explicit measures for their concepts and compelling evidence of their capacity to explain differences in performance at the firm level (Davis, 2004). In relation to the research topics addressed in this thesis, the confusion and the uncertainty surrounding the DCT are apparent. The gaps and limitations in the process of renewing a firm's competitive advantage provide the opportunity to enhance general understanding of the dynamic capability approach. In what follows, therefore, dynamic capabilities are reviewed and classified according to their different theoretical locus and managerial influences.

### 2.3.1 Classification of Dynamic Capabilities

To aid understanding of how dynamic capabilities relate to the renewal of a firm's competitive advantage through the reconfiguration of its resource base, various dynamic capability-related studies are reviewed and classified in Table 1, and then discussed in the following section. The review and classification take account of both conceptual and empirical aspects.

Table 3: Classification and overview of research on dynamic capabilities.

| Theorist | Sources of dynamic capabilities | Boundaries and barriers | Firm performance | Context of dynamic capabilities |
|---|---|---|---|---|
| Leonard-Barton (1992) | New product development and innovation | Core capabilities / core rigidities | Distinct capabilities to innovate and differentiate | Dynamic capabilities are facilitators of change |
| Teece *et al.* (1997) | Managerial and organisational processes | Managerial beliefs as constraining factors | Intellectual properties and complementary assets | |
| Van de Ven *et al.* (1999) | | Managing stages of changes | | |
| Eisenhardt and Martin (2000) | Product development, strategic decision | Dynamic capabilities are | Facilitators to improve | Idiosyncratic and path dependent |

| | | | | |
|---|---|---|---|---|
| | making, transfer processes, resource allocation routines, knowledge creation, alliance and acquisition routines | necessary but not sufficient conditions for competitive advantage (boundary conditions) | existing resource configurations and build new resource configurations | |
| Tripsas and Gavetti (2000) | Managerial beliefs and cognition | | | |
| Griffith and Harvey (2001) | Decision structure, resource allocation / alignments | | Difficult-to-imitate resource combinations | |
| Lawson and Samson (2001) | Innovation management | | | |
| Helfat and Peteraf (2003) | Organisational processes and procedures | | | "Branching" of new capabilities (capability duplication) |
| Rindova and Taylor (2003) | Change processes; decision structures and customer processes | | | |
| Verona and Ravasi (2003) | Knowledge based processes and continuous innovation | | Ability to innovate continuously | |
| Zott (2003) | | | Factors of differentiation (timing, cost and learning effects) | |
| Ethiraj (2005) | Customer processes | | Repeating interactions with customers (cost and benefits) | Repeating interactions with customers are context specific |

The central thesis of Teece *et al.* (1997) is that capabilities as sources of competitive advantage are related to managerial and organizational processes. Eisenhardt and Martin (2000) identify more specific processes which they cite as examples of dynamic capabilities; product development (combining various skills in cross-

functional teams), strategic decision making (pooling of various business, functional and personal experiences), transfer processes (copying, transferring and recombining knowledge based resources), resource allocation routines (distribution of scarce resources), strategic co-evolving (synergistic resource combinations, social bonds), strategic patching to realign the match between businesses and resources (add, combine and split) to change market opportunities, knowledge creation (new thinking, linkage between the local firm and outside resources), and alliances and acquisition routines (new resources, pre- and post-acquisition routines). These processes determine 'how things are done' in a firm (Teece *et al.*, 1997; Eisenhardt and Martin, 2000). In this regard, dynamic capabilities relate to managerial beliefs and are shaped mainly through a firm's intellectual properties or complementary assets and possible future strategic paths available to it. Other scholars have observed that managerial beliefs may act as constraining influences on the emergence of dynamic capabilities (Tripsas and Gavetti, 2000, p. 1151). Their findings illustrate "the evolutionary trajectory of organizational capabilities" and the influence of managerial cognition on the development of new capabilities.

In regard to organizational and managerial processes and beliefs, other scholars maintain that one of the most challenging aspects of management is accomplishing transitions between stages of change (Van de Ven *et al.*, 1999). For instance, transitions (e.g. transformations from product to solution selling) are difficult because they require the change of competencies well-suited to one stage of operation into the new competencies required for a different stage of operation. Therefore, transitions become difficult because, at a certain point, competencies become traps or rigidities (Levitt and March, 1988; Leonard-Barton, 1992). Furthermore, Leonard-Barton (1992) locates dynamic capabilities among the processes of new product development by companies. In this case, core capabilities are defined as distinctive capabilities that strategically differentiate a firm from its competitors. Leonard-Barton (1992) argues that core capabilities comprise values which may not only enhance but also inhibit innovation in a company. This relationship has been somewhat neglected. Leonard-Burton (1992) also proposes that traditional systems and values should be challenged in order to initiate redefinitions of new core capabilities. Hence, dynamic capabilities

are facilitators of change. (Lawson and Samson, 2001) have enriched Leonard-Burton's argument by adopting a more holistic perspective on the evolution of dynamic capabilities whereby they can be seen as pertaining to innovation management. Lawson and Samson (2001) have accordingly developed a conceptual model of "innovation capability" through an in-depth case study of Cisco Systems.

A different perspective is that certain knowledge based processes (knowledge creation, absorption, integration, and reconfiguration) play a substantial role in the development of dynamic capabilities (Eisenhardt and Martin, 2000; Verona and Ravasi, 2003). Dynamic capabilities are viewed as a source of a company's ability to innovate continuously. Alongside the debates on where and how dynamic capabilities are localized within a company, other researchers have discussed them according to their relationship with individual firm performance (Griffith and Harvey, 2001; Zott, 2003). Griffith and Harvey (2001) conceptualize dynamic capabilities as a difficult-to-imitate combination of resources on a global basis – called 'global capabilities' – which generate a competitive advantage. Global dynamic capabilities relate to decision structures among firms and the ability to align related and relevant resources. Even if firms may have similar capabilities, only certain factors give rise to different performances. The performances of firms differ according to the timing, cost, and learning effects of similar dynamic capabilities in different firms (Zott, 2003). Even small variations in these effects, especially when combined, may generate significant differentials among firm performances within the same industry.

The discussion of the importance of context specificity of dynamic capabilities has influenced a different group of researchers (Collis, 1994; Helfat and Peteraf, 2003; Rindova and Taylor, 2003; Ethiraj *et al.*, 2005), who find that dynamic capabilities are related to the firm or to the nature of that firm's environment, and are therefore biased. In this regard, Helfat and Peteraf (2003) discuss the "branching" of capabilities – capabilities are a crucial development factor able to generate new ones. These researchers conceptualize a dynamic capability lifecycle that describes the general pattern and paths in the evolution of organizational capabilities over time, including the founding, development, and maturity stages. Rindova and Tayler (2003)

attributed the evolution of dynamic capabilities to change processes that occur at two different levels: first the micro-level, where key positions are staffed with experienced and skilled top management and responsibilities are delegated to lower levels of the hierarchy; second the macro-level, where competencies respond to changing customer demands. Customer-specific capabilities evolve by learning from repeated interactions with certain customers (Ethiraj *et al.*, 2005). These kinds of capabilities are often context-specific and include different costs and benefits, given that a common denominator for the evolution of dynamic capabilities does not exist.

Several aspects emerge in relation to the different areas of research fields on dynamic capabilities, according to their relevance for this thesis. Firstly, dynamic capabilities are mostly discussed in terms of specific company processes and routines. These areas reflect some of the most important and critical processes of a firm in relation to establishing competitive advantage by leveraging firm-specific dynamic capabilities. However, literature reports shortcomings in how dynamic capabilities interrelate, emerge and shape these processes, and which kinds of challenge emerge within those interactions during the reconfiguration of a firm's existing resource base to renew its competitive advantage. In addition, capabilities include boundaries and barriers, especially in the context of change. Existing capabilities may turn into traps or rigidities and jeopardise the change efforts of a company. However, theoretical gaps and misunderstandings still exist on how difficulties and challenges can be described during these periods of change.

Alongside those challenges and risks, dynamic capabilities relate strongly to a firm's performance; and those with specific characteristics are facilitators for a company to establish competitive advantage. Admittedly, those characteristics are often not clearly defined within literature according to their creation and possible side-effects, especially during periods of change.

The finding that dynamic capabilities are firm-specific increases the difficulty of discussing and conceptualizing more general concepts across firms. Firm resources and individual dynamic capabilities are context-specific. In detail, a firm's existing

resource base comprises firm-specific resources and dynamic capabilities which interact and change over time. Hence, to increase understanding about what happens during the change and reconfiguration period, a firm's resource base may need to be taken into account as a combination and summary of firm-specific resources and dynamic capabilities. Hence, a further review on the characteristics and contexts of the concept of dynamic capabilities is conducted in the following section.

### 2.3.2 Characteristics of Dynamic Capabilities

Dynamic capabilities evolve from path-dependent processes like learning. They give rise to codification so that experience is easier to apply and accelerate the building of routines (Grant, 1996; Teece *et al.*, 1997; Eisenhardt and Martin, 2000). A crucial aspect of evolution is selection, not variation, because it is difficult to determine what experience should be generalised from the extensive situation-specific knowledge that occurs. The implementation of dynamic capabilities is consequential because they are often combinations of simpler capabilities and related routines, some of which may be foundational to others and hence must be learnt first.

Dynamic capabilities are often described in prototyping and testing to gain new knowledge quickly (Collis, 1994; Grant, 1996). They rely on real-time information like early alerts, intuition, parallel consideration and cross-functional relationships and intensive communication among those involved in the process. The literature on dynamic capabilities exhibits similarities in its definitions and descriptions of important characteristics. These characteristics are important for the discussion on how existing resource configurations may be managed during reconfiguration periods in order to renew a firm's competitive advantage.

Table 4: Characteristics of Dynamic Capabilities.

| **Characteristics** | **Description** |
|---|---|
| Dynamic Capabilities are highly Path Dependent | Well-known learning mechanisms like the firm's past experience guide the evolution and characteristics of dynamic capabilities ( Teece *et al.*, 1997; Eisenhardt and Martin, 2000; Makadok, 2001). |
| Dynamic Capabilities relate to market dynamics | DC resembles the traditional concept of routines. DC are simple, experimental, and unstable processes that rely on quickly created new knowledge and iterative execution to produce adaptive, but |

| | |
|---|---|
| | unpredictable, outcomes in relation to dynamic market environments (Cyert and March, 1963; Nelson and Winter, 1982; Nelson and Winter, 1982; Nelson, 1991) |
| Dynamic Capabilities consist of specific and firm individual strategic and organisational processes | Dynamic Cabpabilities create value for firms within dynamic markets by manipulating resources into new value-creating strategies ( Eisenhardt and Martin, 2000; Lawson and Samson, 2001; Griffith and Harvey, 2001; Winter, 2003; Verona and Ravasi, 2003; Helfat and Peteraf, 2003; Rindova and Taylor, 2003; Ethiraj *et al.*, 2005). |
| Dynamic Capabilities are facilitators and enablers to reconfigure and create new resources | DC enhance existing resources through reconfiguring (function of manipulation) company resources and establishing new resources to drive new value-creating strategies (Eisenhardt and Martin, 2000; Griffith and Harvey, 2001; Verona and Ravasi, 2003; Ethiraj *et al.*, 2005). |

Dynamic capabilities have been conceptualised by various researchers as antecedent, specific and identifiable organisational and strategic processes to recombine a firm's resource base in order to generate new value-creating strategies (Grant, 1996; Teece *et al.*, 1997; Eisenhardt and Martin, 2000; Winter, 2003). Eisenhardt and Martin (2000) attribute some more detailed properties to dynamic capabilities: they are not vague (they are clear) or tautological, but idiosyncratic (individualized) in their details and path dependent in their emergence. Dynamic capabilities are often described as "learning mechanisms" like repeated practices, and small losses lead to the accumulation of tacit and explicit knowledge and effective learning. In this context, dynamic capabilities have significant commonalities in best practices, which are effective ways to execute particular dynamic capabilities across a firm. There are multiple paths to the same dynamic capabilities; routines are substitutable and replaceable across different contexts; and dynamic capabilities *per se* are not likely to be sources of sustained competitive advantage.

In summary, the attributes of dynamic capabilities are the extensive and frequent use of prototyping, real-time information, experimentation, and multiple alternatives. They rely on situation-specific knowledge applied in the context of simple boundary and priority setting rules. Nevertheless, improvisational processes are dissipative, meaning that they require constant energy to stay on track – if they have too little

structure, they may easily slide to the edge of chaos. Therefore dynamic capabilities are difficult to sustain. Moreover, the threat to competitive advantage arises from outside the firm, but also from within it. In particular, further research work is required on the experience that companies acquire in applying the extensive situation-specific knowledge that occurs during the reconfiguration of firm resources. In this context, threats from within the firm have been less treated within academic literature than have dynamics outside the firm. Those external and market dynamics relate to the concept of dynamic capabilities.

#### 2.3.2.1 Market Dynamics in the Context of Dynamic Capabilities

Researchers report that the RBV breaks down in high-velocity markets, where the strategic challenge is to maintain competitive advantage, because the duration of the competitive advantage is unpredictable and time is an essential aspect of strategy (Eisenhardt and Martin, 2000; Winter, 2003; Ethiraj *et al.*, 2005). In these markets, the dynamic capabilities that drive competitive advantage are themselves unstable processes which are difficult to sustain. Eisenhardt and Martin (2000) propose that the traditional views of dynamic capabilities (routines) are valid in regard to moderately dynamic markets, but not to very dynamic ones. It is unlikely that sustainable competitive advantage can be achieved in high-velocity markets (D'Aveni, 1994). According to the RBV, sustainable competitive advantages derive from VRIN (valuable, rare, inimitable, non-substitutable) dynamic capabilities (Eisenhardt and Martin, 2000). Dynamic capabilities are valuable (V), and rare (R). Nevertheless, the immobility and inimitability of dynamic capabilities in very dynamic markets are irrelevant – they are substitutable. Hence, dynamic capabilities can be a source of competitive advantages in very dynamic markets, but not a source of sustainable competitive advantage. According to Eisenhardt and Martin (2000), dynamic capabilities vary with market dynamism.

When the markets are moderately dynamic, capabilities are to be found in routines that are complicated, detailed and analytic processes. These processes rely closely on existing knowledge and linear execution to produce mainly predictable outcomes. Change occurs frequently and along roughly predictable and linear paths with clear

market boundaries and known players (competitors, customers, complements). Efficient processes can be created as codified detailed routines and sequences of problem solving steps, but, in high-velocity markets, rapid and unpredictable changes predominate because change becomes non-linear and less predictable. Uncertainty cannot be modelled as probability because it is not possible to specify future states *a priori*: the overall industry structure is unclear, market boundaries are blurred, and successful complementers are difficult to define and shifting. In high-velocity markets, dynamic capabilities are simple, experimental (not analytic), iterative (not linear), unstable and fragile processes that rely on quickly-created new knowledge and iterative execution to produce adaptive, but unpredictable, outcomes. These processes and routines often consist of a few rules that specify boundary conditions on the action of managers or indicate priorities (Eisenhardt and Martin, 2000; Griffith and Harvey, 2001; Verona and Ravasi, 2003).

In the context of this section and in relation to this research work, the challenge is determining how dynamic capabilities are controllable – especially emerging dynamic capabilities as defined by Eisenhardt and Martin (2000) as unstable and fragile processes that rely on quickly-created new knowledge. Furthermore, the assumption emerges that dynamic capabilities, especially experimental and iterative ones, may generate unexpected dysfunctional effects with unpredictable outcomes. These dysfunctional effects are still insufficiently theorized in literature and may provide answers on why resource reconfigurations are difficult to approach on the basis of their dynamics of dysfunctional effects. In this regard, discussing the value of dynamic capabilities will help to curb emerging and unexpected side-effects (dysfunctional effects).

#### 2.3.2.2 Value of Dynamic Capabilities

The value of dynamic capabilities relates to their production process for the firm, the strategic initiative and to the capability itself. Eisenhardt and Martin (2000) see the value of dynamic capabilities for a firm's competitive advantage as residing in the resource configurations that they create, not in the capabilities themselves. Functionalities of dynamic capabilities may easily be duplicated within a firm, which

indicates that dynamic capabilities are valuable, not for maintaining sustainable competitive advantages, but rather for building new resource configurations in the quest for temporary advantages. Hence, dynamic capabilities are necessary but not sufficient conditions for competitive advantage – especially for strategic initiatives which aim to implement new business strategies to improve a firm's existing resource configurations in order to achieve long-term advantages. Nevertheless, dynamic capabilities are used to build new resource configurations in pursuit of short-term advantages as well.

It is obvious that market dynamism impacts on the value of dynamic capabilities. The sustainability and causal ambiguity of dynamic capabilities vary with market dynamism. In moderately dynamic markets, dynamic capabilities are complicated, predictable, analytic processes and routines that rely on existing knowledge and are causally ambiguous because they are complex and difficult to observe. In high velocity markets, dynamic capabilities are simple, experimental, and iterative processes and rules to enable emergent adaptation which relies on situation-specific knowledge, and are causally ambiguous because they are simple.

The finding that value resides in the dynamic capabilities which facilitate the reconfiguration of the firm resources, and not in the capabilities themselves, raises theoretical questions. In this context, the academic literature does not offer concepts on the dynamics involved in the creation and utilization of the dynamic capability values. Furthermore, it is unclear how threats and difficulties can be conceptualized during the activation of those dynamic capability processes, especially during strategic initiative implementations. Such threats and difficulties may explain why successful companies encounter difficulties in reconfiguring existing resource configurations in the context of strategic initiatives to sustain their competitive advantage. This aspect leads to discussion of how dynamic capabilities enable and facilitate resource manipulations and reconfigurations.

### 2.3.2.3 Enabling Functionalities of Dynamic Capabilities in the Context of Strategic Initiatives

Dynamic capabilities are close to the concept of transforming company resources. Eisenhardt and Martin (2000) described four main functions to manipulate existing company resources through dynamic capabilities: *resource creation, resource integration, resource re-combination, and resource releases*. In this context, dynamic capabilities are defined as special processes which can be developed and mobilised through strategic initiatives (e.g. product development, forming alliances, and strategic decision making).

Building on the concept of Eisenhardt and Martin (2000), Makadok (2001) discusses two main capabilities that a firm can develop through strategic initiatives to change its resources: first, resource picking, which implies greater emphasis on cognitive and informational factors; second, resource building, which implies greater factors on process related factors. Resource picking can be understood as the main mechanism with which to create economic rent for a firm. However, creating economic rent starts before the acquisition of a resource. Firms with superior resource-picking capabilities – dynamic capabilities – are better able to discern which resources are winners and which are losers. Hence, they can bid on the former while avoiding the latter. In comparison, Makadok's (2001) resource-picking function relates more to Eisenhardt and Martin's (2000) resource re-combination and new resource releases. Resource building relates more to resource creation and resource integration.

Additionally, other scholars have developed supporting notions on the enabling functionalities of dynamic capabilities to reconfigure a firm's business resources in the context of acquisitions (Mitchell, 1991; Mitchell *et al.*, 1999; Karim and Mitchell, 2000). Karim and Mitchell (2000) highlighted that firms which aim to change their businesses utilise their enabling functionalities – acquisition-related dynamic capabilities – to reconfigure their resource bases. In this regard, the reconfiguration of resources involves the retention, deletion, and addition of resources, in a similar way to Eisenhardt and Martin (2000) four main functionalities of dynamic capabilities. Therefore, firm acquisition is an example of how a firm can facilitate idiosyncratic

dynamic capabilities to reconfigure its resource base to stay in business. This is similar to the concept of strategic initiatives where firms scope to implement their strategies by mobilising the reconfiguration of the firm's most valuable sources of competitive advantage: resources and knowledge base.

The assumption arises that those sources of competitive advantage are reconfigured through strategic initiative specific dynamic capabilities. Those dynamic capabilities are able to mobilise the reconfiguration of firm resources and re-combination of the idiosyncratic knowledge base of the firm during the strategic initiative implementation period. Furthermore, reconfiguring a firm's resources and knowledge base through strategic initiative oriented dynamic capabilities raises the next assumption that those dynamic capabilities are able to yield different results within the initiative implementation process. As strategic initiative related dynamic capabilities are mobilised through strategic initiative implementations, results may emerge which are valuable for the firm and results which are challenging for the firm and produce constraints on its ability to renew its sources of competitive advantage to stay in business.

### 2.3.3 Discussion of the Dynamic Capabilities Theory

Dynamic capabilities provide additional dynamic perspectives on how competitive advantage can be renewed by reconfiguring existing company resources through strategic initiatives. In this regard, dynamic capabilities are firm specific, and are mostly described in literature as idiosyncratic and path dependent and strongly related to a firm's history. Moreover, if dynamic capabilities are firm specific the assumption emerges that there are dynamic capabilities which are strategic initiative specific and critical for the individual strategic initiative implementation success. Furthermore, they are fragile and unstable processes and rely on situation-specific knowledge applied in the context of simple boundary and priority setting rules. Overall, dynamic capabilities relate closely to a firm's or strategic initiative performance and are not themselves sources of competitive advantage or renewal of a firm's competitive advantage. Moreover, the value of dynamic capabilities resides in the ability to reconfigure a firm's existing resource base through specific functionalities described

in literature as *resource creation, resource integration, resource re-combination, and resource releases*. Hence, the value of dynamic capabilities in reconfiguring a company's existing resources and knowledge base relates strongly to the quality and capacities of initiative related implementation processes. Nevertheless, several theoretical gaps are apparent in this research.

Firstly, dynamic capabilities are mostly described and identified in terms of idiosyncratic processes and routines (e.g. a strategic initiative resource allocation and prioritisation processes or product innovation processes). Around these specific and mostly critical processes for the firm, dynamic capabilities can emerge through strategic initiatives to interrelate and shape the firm's sources of competitive advantage. However, the interrelations among the dynamic capabilities shaping the firm's sources through strategic initiatives are still insufficiently conceptualised in the theoretical literature, and especially in regard to how idiosyncratic and strategic initiative related dynamic capabilities renew a firm's source of competitive advantage. How strategic initiatives use and apply dynamic capabilities are not described and explained. The assumption therefore emerges that strategic initiative implementation may have the dynamic capabilities required to reconfigure the firm's resources and knowledge base to renew its competitive advantages. Nevertheless, strategic initiatives may differ in their ability to develop and apply the dynamic capabilities identified in order to manipulate and reconfigure existing resource configurations. Furthermore, dynamic capabilities of different initiatives may differ in their possibilities to interrelate and collaborate, and they may create different effects (dysfunctional effects) and outcomes during the reconfiguration of a firm's existing resource base. This assumption may yield additional insights into why the reconfiguration of resources is difficult for an organisation.

Secondly, some researchers suggest that dynamic capabilities may turn into traps or rigidities and jeopardise the change efforts of a company or a strategic initiative. However, theoretical gaps and misunderstandings still persist on how those difficulties and challenges can be described – especially during periods of transforming a firm's resource base. The assumption is that challenges and threats

may exist for a firm and especially for the strategic initiative implementation's success during the highly dynamic period of changing the existing resource base, which leads to the third aspect of the discussion on the dynamic capability theory.

Thirdly, most researchers view the threats to competitive advantage as arising outside the firm. Few of them discuss the view that threats may also emerge from within the firm; especially during the process of renewing a firm's competitive advantage. Those threats and challenges may explain why successful firms sometimes fail to renew their competitive advantage. Hence, the assumption emerges that companies encounter different within-firm experiences and threats during the reconfiguration of their resources especially through strategic initiatives which require the further clarification partly provided by this research work.

Fourthly, the reconfiguration process driven by strategic initiative implementation activities relates to specific knowledge acquired during the reconfiguration process of firm resources. This specific knowledge created in the context of reconfiguring firm resources may include difficulties. In this regard, the assumption emerges that difficulties may occur during the creation of that strategic initiative-specific knowledge and relate to whether dynamic capabilities can facilitate the renewal of a firm's resource base.

## 2.4 Knowledge Based View of the Firm

The knowledge based theory of the firm (KBV) emerged from the RBV within the field of strategic management, defining the firm as a growing body of knowledge (Kogut and Zander, 1992). Firms are knowledge creating entities with the capability to create and utilise new knowledge. Outlining fundamental definitions, Berger and Luckmann (1967, p. 27-30) define knowledge as a *'socially constructed true belief'*, and organisational knowledge as a *'collective socially constructed belief shared by some or all of the organisational members'*. In this relation, knowledge and organisational knowledge relate to individual learning, from where organisational learning concepts and processes emerged (Weick, 1991; Argote, 1999).

Furthermore, scholars have integrated organisational knowledge and routines with the dynamic perspective of firms' competitive environments (Nelson and Winter, 1982). The firm has been understood as a repository of knowledge, consisting of routines that guide organisational action (Patriotta, 2003). This has led to the combination of organisational learning and innovation with the firm's evolving knowledge base (Cohen and Levinthal, 1990; Nadler and Tushman, 1995; Pettigrew *et al.*, 2002). This perspective implies that a learning organisation comprises multiple communities-of-practice (Pettigrew, 1987; Pettigrew *et al.*, 2002). In this context, each community-of-practice creates experimental and interpretative activities within its environment from which sense making emerges.

Furthermore, knowledge-related concepts can be divided into two categories: individual-related concepts of knowledge, and collective ones. Individual-related knowledge concepts are often classified into three different groups: skills (Mueller, 1996; Haines, 1999; Kanter, 1999), experience (Levitt and March, 1988; March *et al.*, 1991), and expertise (Starbuck, 1992). These concepts relate to individuals and consider individuals to be the principle possessors of knowledge. By contrast, collective forms of knowledge relate to the capabilities constructed jointly by organisational members as cross-functional teams (Newell and Huang, 2002).

Collective forms of knowledge prioritize capabilities (Amit and Schoemaker, 1993; Grant, 1996).

Finally, the increasing importance of knowledge as a strategic enabler for firms has created a literature on research into knowledge in organisations (Grant and Baden-Fuller, 1995; Nonaka and Takeuchi, 1995; Grant, 1996; Spender, 1996; Eisenhardt and Santos, 2001; Patriotta, 2003). Scholars argue that the firm's ability to create and utilise emerging knowledge is critical for its success, and is the most important source of a firm's sustainable competitive advantage (Kogut and Zander, 1992; Nonaka and Takeuchi, 1995). Moreover, firms are continuously challenged to create valuable knowledge to re-vitalise their most important source of competitive advantage: the firm's idiosyncratic knowledge base (Grant, 1996). In detail, competitive advantage can be achieved and renewed through the dynamic perspectives of knowledge creation (Berger and Luckmann, 1967; Nonaka and Takeuchi, 1995; Nonaka and Konno, 1998), utilisation (Moran and Ghoshal, 1996), and integration (Demsetz, 1991).These perspectives on the knowledge based theory relate to the concepts of dynamic capabilities. Dynamic capabilities define and leverage collective forms of knowledge by renewing and sustaining a firm's sources of competitive advantages (Collins, 1993; Blackler, 1995). Besides these fundamentals, the classification of knowledge and knowledge based theories are rich in their diversity and research focus.

Alongside the growing KBV literature, some researchers have argued that strategic initiatives develop new knowledge and create their own knowledge bases over the entire strategic initiative life cycle, from the strategic initiative idea to the strategic initiative's implementation (Wielemaker, 2003; Lechner *et al.*, 2003; Marx, 2004). In this context, strategic initiatives are conceptualised as distinct knowledge bases which become linked to a firm's knowledge base in order to inject new knowledge into the firm. Therefore, strategic initiatives create and utilise new knowledge triggered by managerial decisions to implement the firm's strategy, which is based on productive and environmental decisions. However, the increasing dynamism of the managerial environment, with frequent and rapid changes in technology, customer behaviours,

and competition, challenges strategic initiatives to make their advantages sustainable, or at least to create a temporary advantage (D'Aveni, 1994; Eisenhardt and Martin, 2000). In these situations, the ability to learn quickly in order to alter the resource configuration in response to market change becomes crucial for a firm's performance. Thus renewing the sources of competitive advantage through strategic initiative implementation relates to managerial and organisational processes, these being defined as the firm's ability to integrate, build and reconfigure internal and external competencies and knowledge in order to address the rapidly changing environments (Grant and Baden-Fuller, 1995).

The KBV provides a context in which to consider the combination of firm-specific and instanced resources through the utilization of dynamic capabilities and their impacts on the idiosyncratic knowledge base of the firm through strategic initiative implementation. In this regard, the idiosyncratic knowledge base of a firm relates to the definitions and concepts of firm resources and dynamic capabilities. Furthermore, the knowledge base perspective provides the opportunity to discuss and enrich the concepts of renewing a firm's competitive advantage through the perspective of knowledge creation by reconfiguring a firm's resources and utilizing its dynamic capability as a whole. According to the research focus of this thesis, the concepts of organisational knowledge and knowledge creation are particularly important in grasping the theoretical grounds for renewing a firm-related knowledge base by utilizing the transformational power of strategic initiatives.

### 2.4.1 Theory of Knowledge and Organisational Knowledge

Knowledge, and especially organisational knowledge, relates to the fundamentals of the action-oriented theory of organisational learning (Argyris and Schön, 1978). This theory is built on the relation between action and cognition in organisations. The challenge that cognitive approaches face is how to establish sense making connections between the 'outside world' and the cognition of the organisation's information gathering and processing activities (Winograd and Flores, 1986; Tenkasi and Boland, 1996). The cognitive theory has been developed from the standpoint of the individual and then extended to organisations. The concept implies the existence of an isolated

mind (Patriotta, 2003) able to create inner perspectives and interpretations that are related to the 'outer world'. In this regard, the organisation's mind creates knowledge about its outside world and tries to make sense of this information through the creation of new meanings as a result of the knowledge creation process (Daft and Weick, 1984; Morgan, 1997). Furthermore, organisational hierarchies provide effective concepts with which to structure and embed new knowledge creating entities as strategic initiatives in existing organisational environments. The process enriches existing organisational routines and standard operating procedures, and it acts as a new programme of action which includes the capability to create new knowledge for a firm by supporting and implementing its decision-making mechanisms. Nevertheless, major dilemmas arise within organisations in achieving a balance between control and innovation and between static and dynamic efficiencies of operational procedures (Argyris and Schön, 1978; Lichtenstein, 1997). Especially in periods of change, organisations reinforce resistance to change by interpreting and making sense of their environmental threats and trends in different ways. Interpreting, meaning and sense making are identified in the academic literature as levers for creating new organisational knowledge (Thomas *et al.*, 1993). In detail, sense making is defined as continuous action by an individual or a group of individuals organised into a team which deals with ambiguous and ambivalent actions, mostly by interrelating with tacit knowledge carriers (Nonaka and Takeuchi, 1995). These dynamics of organisational sense making during the interaction of tacit and explicit knowledge relate to the knowledge repository concept, which is also defined as the memory and mind of an organisation (Nelson and Winter, 1982).

The best established knowledge based theories are grounded on the distinction between tacit and explicit knowledge. They derive from Polanyi's study of 1966, which inspired various scholars to enrich the theory of knowledge with new insights and understandings (Nelson and Winter, 1982; Nonaka and Takeuchi, 1995; Grant, 1996). Explicit knowledge enables the simple transfer of knowledge, whereas tacit knowledge reflects often untapped and hidden knowledge that is not easily transferable. Tacit knowledge includes experience; and it is idiosyncratic, somewhat difficult to identify, and often described as the implicit knowledge that individuals use

to deal with the world (Patriotta, 2003). By comparison, explicit knowledge can be codified and articulated and therefore transferred through a formal process. The classification of tacit and explicit knowledge enables distinctions to be drawn between 'knowing how' and 'knowing about', between subjective and objective knowledge, and between procedural and declarative knowledge (Grant, 1996) as carriers and components of the knowledge creation process.

#### 2.4.1.1 Knowledge Creation Theories

Nonaka and Takeuchi (1995) conceptualised knowledge creation as a process of continuous and dynamic interaction between tacit and explicit knowledge. From this viewpoint, organisations are constantly engaged in creating new knowledge based on the combination of existing knowledge or through new inventions (Nahapiet and Ghoshal, 1998). Nonaka and Takeuchi's findings are based on empirical evidence on research in Japanese firms. They regard knowledge creation as consisting of four processes: socialisation, externalisation, combination, and internalisation. Socialisation relates to the process of formal and informal social interaction and the sharing of experience, whose outcome is knowledge redundancy, which enables individuals and groups to exchange knowledge and to learn from each other (Nonaka and Konno, 1998). Externalisation converts tacit knowledge into explicit knowledge by using metaphors or models to represent thoughts that are otherwise complex to communicate. Combination is the crafting and systemising of different concepts into a knowledge system. Internalisation embodies explicit knowledge into tacit knowledge through two different ways: first, when individuals 're-experience' the experience of others who have created such knowledge; second, when individuals create experience through doing, a process denoted by the term 'learning-by-doing' (Pavitt, 1991). Iterations among these four processes stimulate the creation of new knowledge at the level of individuals, collectively at the group level, and at the organisational and inter-organisational levels. Nonaka and Takeuchi (1995) stress a number of further features of knowledge creation. Firstly, the greater importance of tacit knowledge with respect to explicit knowledge, given that the key source of knowledge creation is the mobilization and conversion of tacit knowledge by individuals as enablers for knowledge and organisational innovation. Therefore, knowledge creation relates

closely to the beliefs and commitments of individuals, their interpretations and sense–making, and it stimulates and guides their actions (Spender, 1996). Secondly, Nonaka and Takeuchi's theory of knowledge creation comprises both different types of knowledge (epistemological view) and knowledge creating entities (ontological perspective). From this viewpoint, knowledge is only created by individuals. Thirdly, creating knowledge through the interaction between tacit and explicit knowledge becomes larger in scale and moves up the ontological levels (knowledge spiral). Knowledge creation processes may spread to a group, organisation, and inter-organisational level.

Moran and Ghoshal (1996) developed a more simplified version of the concept of knowledge creation. Their theory envisages the two main processes of combination and exchange. Combination has two aspects: incremental and radical. Knowledge can be created through both incremental change of existing knowledge and radical change. Radical change can involve processes such as pragmatic change (Kuhn, 1970), double-loop learning (Argyris and Schön, 1978), and generative learning (Senge, 1990). Second, the exchange process of knowledge creation takes place through social interaction between the parties who provide the knowledge. Therefore, through social interaction and negotiation, explicit knowledge can be transferred, and tacit knowledge can be learnt through shared experiences and understanding (Moran and Ghoshal, 1996). Compared to the knowledge creation theory proposed by Nonaka and Takeuchi (1995) and Moran and Ghoshal's (1996) theoretical model of combination-exchanged, is more simplified and less detailed.

Criticisms of the above-described theories arose from discussion of the process by which tacit knowledge is transformed into explicit knowledge (Nonaka and Takeuchi, 1995), and Moran and Ghoshal's combination-exchanged model was accused of being too simplified (Tsoukas, 1996). These criticisms prompted scholars to develop more proactive representations of knowledge creation, including important aspects of sense making (Drazin *et al.*, 1999; Crossan *et al.*, 1999). In their view, the knowledge creation processes consists of intuiting, interpreting, integrating, and institutionalizing. These were used by other researchers as a new foundation for

discussing the concept of initiatives as knowledge creating entities within an organisation.

### 2.4.1.2 Knowledge Creation in the Context of Strategic Initiatives

The discussion of strategic initiatives as knowledge creating entities led Wielemaker (2003) to conceptualise three initiatives related knowledge creating phases: linking, interpreting, and integrating. Wielemaker (2003) pointed out that initiatives do not necessarily have to proceed sequentially through these three phases. Moreover, an initiative may iterate backward and forward across these phases through iterative loops (Van de Ven, 1992; Wielemaker, 2003). Individuals and roles at different organisational levels become involved during the knowledge creating phases of an initiative. At the linking stage, an individual knowledge carrier interacts with other individuals and creates new knowledge as new ideas and possible new opportunities for a firm. At this stage other knowledge is collected for knowledge recombination by connecting with other knowledge carriers in order to create new knowledge (Clark and Fujimoto, 1991; Hedlung, 1994). Explicit and tacit knowledge are utilized to create new knowledge at this stage. However, explicit knowledge faces the critique to represent a way to create new ideas and find new opportunities. By comparison, tacit knowledge is personal, not codified (e.g. database, templates etc.) and implicit transferred between individuals (Nadler and Tushman, 1998). Therefore, the way to create new ideas is to contact other knowledge carriers and create new knowledge through personal interaction (Clark and Fujimoto, 1991; Hedlung, 1994). Moreover, the interaction with other individuals should be interdisciplinary and a prerequisite to simulating the creation of new ideas by regularly updating a firm's existing knowledge base (Nadler and Tushman, 1995). Wielemaker (2003) argues that knowledge itself is not enough to generate new ideas – intuition, as a integrated pattern of personal experience (Crossan *et al.*, 1999), is also necessary. Intuition in combination with creativity and unexpected occurrences generates new ideas and opportunities which become sufficiently robust to initiate the first step in new knowledge creation (Drucker, 1985; Baden-Fuller and Volberda, 1997). The interpretation stage continues to shape the new ideas, which are still fragmented in the individuals' minds. At this stage, individuals shape the new ideas by analysing and

assembling bits and pieces into a coherent whole: this is termed 'kaleidoscopic thinking' (Kanter, 1999). Metaphors, analogies, challenging the familiar and analysing the counter-intuitive are methods with which to produce that coherent whole (Nonaka and Takeuchi, 1995). Interactions among those methods and the validation of their results are necessary, and they fit well with the combinative process of strategic initiatives. In this regard, strategic initiatives – especially entrepreneurial ones – should be evaluated collectively according to their contribution to knowledge creation and to creating the coherent whole, instead of each individual initiative being assessed on its own (McGrath, 1996). Hence, the collective and interpretive sense making process is much richer and facilitates the interpretation of strategic initiatives in the context of knowledge creation. The last stage of knowledge creation in the context of strategic initiatives is the integration stage, which yields a detailed picture of the coherently developed concept. Individuals are brought together into teams to transform the emerged concepts from the previous stages into an explicit implementation plan. According to Nonaka and Takeuchi (1995), a team of individuals can proceed at this stage with the focus on integrating the knowledge and preventing actual transfers of knowledge from occurring. The initiative spreads the knowledge creating process from the group to the firm level, according to Nonaka and Takeuchi's (1995) concept of the knowledge spiral. This stage requires the formalization of rules and procedures to establish the routines of the workgroups and to conform with the rest of the organisation's knowledge (Crossan *et al.*, 1999).

In summary, the knowledge creation process in general and in the context of strategic initiatives has been conceptualised and analysed by various knowledge-related studies. Nevertheless, limitations and gaps emerge, especially within the processes of knowledge creation (side-effects of knowledge creation). Strategic initiatives are conceptualised as knowledge creating entities which develop their own knowledge base over time. This knowledge base expand the overall knowledge repository of a firm with new knowledge – organisational knowledge. The gaps and unwanted side-effects – dysfunctional effects –that arise during the knowledge creation process are still unexplored in the literature reviewed here. Those gaps and side effects may furnish understanding as to why the transformation of competitive advantages is risky

and why successful companies may fail to sustain their competitive advantages over time. Furthermore, the reviewed literature leads to the assumption that a company is grounded on multiple knowledge bases and repositories which differ in their capacities to drive the transformation of a firm's idiosyncratic knowledge base. Those variations of knowledge bases are limited in their compatibility with other knowledge bases, which leads to the creation of unexpected and unplanned organisational knowledge ('negative knowledge'), classified as dysfunctional effects. According to Patriotta (2003), knowledge bases are one of the most important forms of storing organisational knowledge and facilitating the routinization of activities, often described as knowledge repositories.

### 2.4.1.3 The Knowledge Base Concept of the Firm

To keep up with the speed of changes and dynamic environments, managers frequently need to adapt their firm's knowledge base (Grant, 1996). Given the diffusion of knowledge inside and outside a firm and the uncertainty in the environment, the recombination of knowledge bases becomes a crucial element for a firm. Knowledge bases include the underlying logic that emerges from a community or organization sharing to some degree the same beliefs about reality. Furthermore, knowledge bases can be defined as stored information that is used to drive present decisions based on an organization's history (Day, 1994). In this context, knowledge bases are idiosyncratic and can be conceptualized as repositories of collective insights and beliefs, including capabilities, policies, procedures, routines, physical artefacts, and rules which can be used when needed (Moorman and Miner, 1997; Patriotta, 2003). A firm can be conceptualized as a multi-form of different knowledge bases which utilizes them to achieve its targets and goals. During its utilization of different knowledge bases, a firm may adopt different mental models (Senge, 1990), working procedures (Hackbarth and Grover, 1999), history (Hall, 1984), organisational routines (Cyert and March, 1963), and organisational culture (Walsh and Ungson, 1991; Walsh, 1995). These varieties and the processes of combining different knowledge bases are less discussed in the literature. In this regard, still unclear is the conceptualization and understanding of possible side-effects – dysfunctional effects –

and a firm's limitations in combining and reconfiguring a multifaceted and idiosyncratic knowledge base.

Some researchers have conceptualised the development of knowledge bases in terms of strategic initiatives (Wielemaker, 2003). They argue that strategic initiatives create their own knowledge base over the entire life cycle from the idea to the implementation. Furthermore, strategic initiatives are conceptualised as distinct knowledge bases, which are linked to a firm's knowledge base. In this context, the linkage varies between being loosely coupled to tightly coupled. Wielemaker (2003) describes these interconnections as the sources from which an initiative cultivates its own organizational form, administration, and roles. The initiative's knowledge base emerges from an opportunity often described as an idea (Pinchott, 1985; Nonaka and Takeuchi, 1995; Birkenshaw, 1997). This may be the result of a problem-driven search caused by a crisis, unexpected occurrences or opportunistic and personal factors (Cyert and March, 1963; Aharoni, 1967). The starting points of emerging initiative related knowledge bases are often described as taking three different forms: radical and incremental strategic change initiatives of a firm to reshape its existing competitive advantage (Quinn, 1980; Henderson and Clark, 1990); autonomous and induced initiatives (Burgelman, 1988); or internal, local, or global market initiatives (Birkenshaw, 1997).

In the context of this thesis, strategic initiatives are defined as firm-related and internal processes. These processes are closely related and integrated within a firm and its organisation in order to recombine the knowledge base to renew the firm's competitive advantages. The initiative shapes its own knowledge base which differs in its form and type of knowledge as an emerging part of the firm's wider idiosyncratic knowledge base. Furthermore, from the dynamic perspective of recombining a firm's resources and capabilities, initiative related knowledge bases may differ and collide with other initiatives or the firm-related knowledge base, and are limited in their compatibility with other emerging knowledge bases during the transformation process, which produces unexpected side-effects. The assumption is that these dysfunctional effects create new knowledge as new resource structures and

capabilities which conflict with the firm's defined strategies. In this relation, limited compatibilities of resources and capabilities may become relevant and relate to the heterogeneity of firm-related knowledge base.

#### 2.4.1.4 Heterogeneity of Idiosyncratic Knowledge Bases

Scholars have maintained that initiative related knowledge bases transform over time and differ in their degree of broad and deep knowledge (McGrath *et al.*, 1995; Wielemaker, 2003). Deep knowledge is specialized, functional and complex (Leonard-Barton, 1995; Demsetz, 1991; Hansen, 1999), whilst broad knowledge relates to a wide-ranging knowledge base created with the aim of exploring interfaces among different specialised areas, including characteristics of integrative and simplified knowledge bases (Hansen, 1999). Therefore, two important aspects of the heterogeneity of a firm's knowledge base emerge. Firstly, deep knowledge relates to the degree of expertise in specific firm-related knowledge fields. This type of knowledge is required to develop the competence of a specialist area of a company: for example, through a strategic initiative firms develop new knowledge fields of expertise. Secondly, the broad knowledge adjusts the range of knowledge. This concerns the ability of a firm to combine different knowledge bases and to exchange knowledge by understanding the interaction of individuals through a common language. Hence, the assumption is that broad knowledge is relevant to transforming, extending and recombining existing knowledge bases in order to renew and strengthen a firm's uniqueness and competitive advantage. The initiative related knowledge creation process addresses both dimensions. Broad knowledge is important for bringing different knowledge areas together and facilitating innovative ideas. Deeper knowledge refines a firm's specialist area. Therefore, to generate ideas, broad knowledge is initially required, whereas their detailing and implementation require deep knowledge. The combination of the two types needs to be addressed by an initiative in order to create new knowledge (Wielemaker, 2003). Nevertheless, the incompatibilities between combining and transforming deeper knowledge fields through broad knowledge are still unresolved in the context of strategic initiatives. Initiatives facilitate sense making in their own way, based on their distinct knowledge base to combine and link deeper knowledge fields together. Hence, the assumption is

that two or more ongoing initiatives face the challenge of creating new knowledge which is initiative-specific and must be recombined with the firm's knowledge base and other initiative related and emerging knowledge bases. This recombination creates overlaps and increases the capacity to create and store new knowledge, with the consequence of evolving dysfunctional effects due to heterogeneous knowledge bases. In this context, heterogeneity is defined as the variation of different idiosyncratic knowledge bases of a firm engaged in extending and recombining its knowledge base as a whole. The heterogeneity relates to the efficiency of recombinations and stimulates the creation of new knowledge (negative knowledge) which is unexpected and diametric to the aims of the initiative and the firm.

### 2.4.2 Discussion of the KBV

Knowledge based perspectives and theories extend the static view of the resource based theory by suggesting that the competitive advantage of a firm can be renewed through the creation, utilisation, and integration of new knowledge as a source of competitive advantage (Lawrence and Lorsch, 1967; Weick, 1982; Demsetz, 1991; Hamel, 2000). The wide range of knowledge perspectives and the broad variation of empirical literature on strategic phenomena are linked and enriched with fundamental knowledge processes as alliances and acquisitions to strategic decision making and innovation. However, the KBV are still confronted with the criticism of not constituting a theory of strategy on its own. Knowledge based theories emerged and offered important insights to improve the understanding of many strategic processes. The process of strategy making is still unresolved in the context of the KBV, and particularly so are concepts on how existing knowledge bases can be reshaped and combined effectively using the concept of strategic initiatives. Moreover, the discussion on the recombination and related limitations of compatibilities between two emerging knowledge bases from different ongoing strategic initiatives is still unresolved. In this regard, conceptual explanations on emerging side effects (dysfunctional effects) during the knowledge creation process, especially in the context of strategic initiatives, are lacking. More clarification of this unresolved area would strengthen the assumption that knowledge can be the most important resource within a firm, as some scholars still maintain that it is crucial to consider the strategic

value of knowledge because not all knowledge is equally valuable (Eisenhardt and Galunic, 2000; Gupta and Govindarajan, 2000). Hence, knowledge sourcing, transfer, and even integration are not necessarily key sources of sustainable competitive advantage unless the knowledge is strategically valuable. Therefore, the strategic initiative related strategy making perspective offers a new way to combine the KBV with the strategy making process to overcome the challenges of the current theoretical debates on knowledge and the criticism that the KBV is not yet a theory of strategy and organisation. Furthermore, this approach to conceptualising the strategic initiative related strategy making process may help develop more consistent knowledge taxonomies and measures, beyond the commonly accepted distinction between tacit and explicit knowledge.

## 2.5 Derived Research Questions

The foregoing review of the four main bodies of literature – strategic initiatives, resource based theory of the firm, dynamic capabilities and the knowledge based theory of the firm – comprises three interrelating aspects. Firstly, the different bodies of literature have been selected critically and based on the researcher's personal interest in order to enrich current debates and perspectives in the areas of investigation chosen. Secondly, based on the selected areas of investigations, the literature review has sought to identify major theoretical gaps that need to be filled. Furthermore, the theoretical gaps identified by the literature review and Berger and Lickmann's (1976) notion that reality is constructed through the social interaction of actors leads to the third aspect focused upon: formulating researchable questions that address the theoretical gaps identified and enable this research thesis to offer a contribution to the current knowledge.

Figure 2: Identified theoretical gaps and research focus.

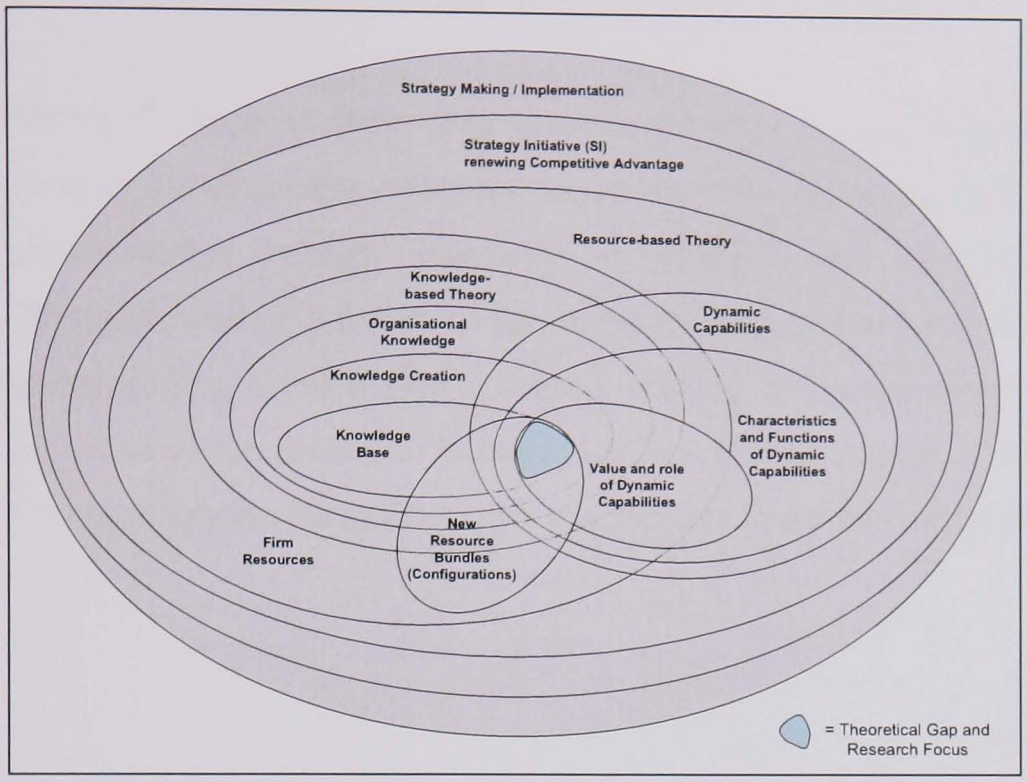



Figure 2 outlines the theoretical gap and research focus identified by this dissertation. The Figure highlights the connections among the concepts of strategic initiatives, resources, dynamic capabilities and knowledge which outline the foregoing discussions of the selected main bodies of literature. In this regard, the following research questions have been formulated.

*How do strategic initiatives affect the existing resources and knowledge base in the context of renewing a firm's competitive advantage?*

The challenges of strategic initiative implementation are still insufficiently observed and conceptualised, and especially the kind of challenges and effects that emerge during the strategic initiative related renewal process. In this regard, the research question comprises the following aspects:

a) *How do strategic initiatives interact with the firm's organisational context and other ongoing strategic initiatives?*

b) *What challenges emerge from the interactions between different strategic initiatives and what are the drivers of such challenges?*

Strategic initiatives have been recognised as an important way to renew a firm's competitive advantage, because it is vital for firms to sustain their economic rents and above-average returns, especially in dynamic and competitive environments. Therefore, finding answers to the above research questions will increase theoretical understanding about a firm's strategy making and competitive advantage renewal processes in the context of strategic initiatives. Furthermore, it will provide the basis for enhancing the current concepts and theories in the field of strategic management.

# 3 Research Methodology

The purpose of this chapter is to describe the methodology developed to fulfil the proposed research objectives and finding answers to the research questions. Specifically, the research aims to discover which kind of challenges and effects emerge during the strategic initiative renewal process and what are the drivers of such challenges.

To find answers to the derived research question a qualitative methodology approach was deemed appropriate. Motivated by personal experience and research interests, the researcher set up a qualitative case-study-based research project. Specifically, the research followed a case study-driven approach by collecting data from a company undergoing strategic renewal managed and implemented through strategic initiative implementation. Sun Microsystems, Inc. was the case company.

The fieldwork started in October 2004 and finished in June 2007. Beginning with pilot interviews (refer to Appendix 2), the first aim was to select and verify the strategic initiatives for the in-depth case studies by collecting relevant background information on the company's strategic focus and business strategies at the same time. After the pilot interview schedule, the three in-depth case studies were conducted on the strategic initiatives selected: Sun Sigma initiative, CRM Convergence initiative and the Balanced Scorecard initiative. In this context strategic initiatives are defined as the unit of analysis of this dissertation.

To increase the range of the data for triangulation purposes, the researcher collected and compared data from different sources, including internal company documentation, published company information, on-site observations and semi-structured interviews addressing different stakeholder groups, in order to obtain the relevant varieties of data. In detail, fifty-one semi-structured interviews were conducted with different stakeholder groups and lasted between 1 and 3 hours, followed by various follow-up meetings and phone-calls to clarify and review the aforementioned interview topics and results from the interviews.

Furthermore, data analysis and interpretation was conducted to conceptualise the new theory of strategic initiative related dysfunctions. In this context, different types of coding methods, namely open coding, axial coding and selective coding, according to the principles of grounded theory, were used (Glaser and Strauss, 1967; Strauss and Corbin, 1990). Those coding methods were applied to reduce, organise and compare the data collected from the strategic initiative in-depth cases.

In summary, all the elements described outline how the research was operationalised and helped to make the research approach transparent to other researchers. The following sections describe the major methodological elements and their relevance to the research design for this study. Moreover, the research methods used in this study are described in terms of their strengths and weaknesses and the rationale behind the choice of the specific method and approach. The last section explains how the research data collected were analysed to achieve the developed research objectives.

## 3.1 Research Design

The aim of the research design was to cover the defined objective represented by the following statement: *"A research design is a logical plan for getting from here to there, where here may be defined as the initial set of questions to be answered, and there is some set of conclusions (answers) about these questions."* (Kuhn 1962, p. 20). Through the research design, the researcher was able to develop a blueprint for the inquiry and to focus the research in a specific direction. Moreover, it helpedin defining the boundaries and addressing potential problems during the implementation of the inquiry. Golden-Biddle and Locke (1997) and Yin (2003) point out that several additional key aspects need to be taken into account when defining a research design. These aspects are the scope of the research, specific objectives of the research, nature of the research topic, the characteristics of the research areas, the availability of resources, the strengths and weaknesses of the researcher in terms of research skills, and specific time constraints which influence the choice and formulation of the research strategy. The following section discusses three fundamental issues concerning the qualitative research approach, including the philosophical stance and

the contrast between quantitative and qualitative research and the overall research orientation in terms of its being a theory building and or a theory testing approach.

### 3.1.1 Qualitative Research Approach

A principal concern of this thesis is to fill major theoretical gaps by investigating how strategic initiative implementation affects a firm's most valuable sources of competitive advantage. This thesis adopts the idea and perspective of social construction that meanings emerge through the verbal and social interaction of actors (Lattimer, 2003), which reflects as well the underlying assumption of the phenomenological perspective. More phenomenologically oriented and influenced theories regard social reality as being constructed and reconstructed by social actors who pre-interpret and interpret social meanings (Finkelstein and Hambrick, 1996; Boeker, 1997; Lattimer, 2003). The main goal of the phenomenologist is to investigate '*the ways in which people create or discover meaning for them, try to make sense of the actions of others and together negotiate sensible social relations*' (Harmon 1990, p. 11).

This work is built on a phenomenological stance, and the research orientation are greatly influenced by several fundamental studies by phenomenologists, including those by Mead (1934), Berger and Luckmann (1967), Blumer (1967) and Glaser and Strauss (1967). Following the principle of social construction, and applying the phenomenological perspective, the researcher needs to be aware of the specifics to analyse and understand the meanings of the collected data. To understand and to interpret the different social actors, the choice of data collection needs to be taken into account during the formation of the research design. Therefore, the phenomenological paradigm is reflected in the underlying logic of the research design and influences the methodological considerations of the study.

The perspective of this thesis on reality differentiates and influences the choice of research aims and methods. Such differences and influence are reflected in the nature of research as either quantitative or qualitative. The research methods used within this approach are "an array of interpretive techniques which seek to describe, translate and

otherwise come to terms with the meaning, not the frequency of certain more or less naturally occurring phenomena in the social world" as the conceptualisation of strategic initiative related dysfunctions (Van Maanen, 1983, p.9). The phenomenological paradigm emerged as a result of criticisms of the positivistic paradigm, as illustrated in the following table.

Table 5: Main criticisms of the positivist paradigm (Collis and Hussey, 2003, p.54)

| | |
|---|---|
| 1 | It is impossible to treat people as being separate from their social contexts and they cannot be understood without examining the perceptions they have of their own activities. |
| 2 | A highly structured research design imposes certain constraints on the results and may ignore relevant and interesting findings. |
| 3 | Researchers are not objective, but part of what they observe. They bring their own interests and values to the research. |
| 4 | Capturing complex phenomena in a single measure is, at best, misleading. For example, is it possible to assign a numerical value to a person's intelligence? |

The criticisms help to explain the main differences between the two paradigms and the consequences the researcher had to deal with by selecting the phenomenological paradigm. In this context, the phenomenological paradigm tends to produce qualitatively rich and subjective data based on small samples (Collis and Hussey, 2003).

Phillips (1987) describes the quantitative researcher as someone who creates scientific knowledge through observing and measuring objective reality, based on the ontological assumption that social reality is independent of human minds. Quantitative research tries to achieve explanations and predictions that are general to other circumstances and settings. General results are built on rigid sampling strategies, combined with identifiable variables and measurable relationships from the data collection process (Luffman, 1996; Lynch, 1997). Methods such as surveys, experiments, inventories and demographic analysis are used during the data collection process to produce quantitative data on the basis of which correlations between defined variables can be established.

In comparison, qualitative research, such as that conducted by this study, does not

measure or predict the phenomena studied. It explores, investigates and understands of strategic initiative related dysfunctions which are socially constructed, complex and indivisible into discrete variables. This qualitative research observes the social actor's perception of the meanings embedded within social settings (Boeker, 1997) and focuses on the unfolding of the process. Qualitative research is more insightful and holistic than quantitative research (Vollmann, 1996) and it often uses case studies as the preferred method of this study, rather than the surveys and experiments of quantitative research (Greiner, 1972; Mayer-Wittman, 1989; Vollmann, 1996; Silverman, 1997). Drawing on the work of Halfpenny (1979), Table 6 lists seven key distinctions between quantitative and qualitative research methods.

Table 6: Main distinctions between quantitative and qualitative research methods

| **Quantitative research** | **Qualitative research** |
|---|---|
| Hard | Soft |
| Fixed | Flexible |
| Objective | Subjective |
| Value-free | Political |
| Survey | Case study |
| Hypothesis-testing | Speculative |
| Abstract | Grounded |

(Source: Silverman 1997, p. 13)

As stated, this thesis does not seek to test or measure the relationship between the phenomena selected and does not offer any predictions. It aims to explore and understand strategic initiative related dysfunctions. Given the study's research objectives, the thesis is qualitative, rather than quantitative. It follows the principles of the social construction perspective (Lattimer, 2003).

### 3.1.2 Theory building versus theory testing

Differences in orientation between theory testing versus theory building reflect another important aspect of any research design. Academic debates address the question by arguing whether data or theory should come first. If research projects aim

to test, expand or modify an existing theory, then the theory must come before the data collection. In comparison, if research projects seek to create a theory from the collected data, the data must come before the theory. However, there are similarities: Snow and Thomas (1994) describe three different purposes of theory which can emerge in combination: description, explanation or prediction. The combination between theory building or testing and the purpose of theory (description, explanation or prediction) require various possible research methods. Table 7 shows six different scenarios linking the two basic orientations (theory- building and theory-testing) to three distinct purposes of theory: description, explanation or prediction. The six resulting combinations highlight the major differences between qualitative and quantitative research.

Table 7: Theory building and theory testing

| | **Description** | **Exploration** | **Prediction** |
|---|---|---|---|
| **Theory Building** | Key question is 'what'. Identify key constructs and variables. Studies are usually based on observation and/or interviewing. | Key questions are 'how' and 'why'. Establish relationships among constructs and provide theoretical rationale for observed relationships. Studies usually use observation and/or interviews. | Key questions are 'who', 'where' and 'when'. Examine boundary conditions of a theory. Result may be a middle-range theory. Studies use observation, questionnaire surveys and interviewing. |
| **Theory Testing** | Focus is on developing and validating measures of key constructs. Studies usually use questionnaire, surveys and/or interviews. | Focus is on documenting relationships among variables through hypothesis testing. Large samples are frequently used with questionnaire surveys or field simulations. Because causal links are examined or implied, researchers must be wary of common-method bias. | Focus is on testing competing theories of the same phenomenon through crucial experiments. Because of the dearth of this type of study, no pattern in field method usage can be discerned. |

Source: Snow and Thomas (1994, p. 466)

Comparing Table 7 with the research project, the similarities are mostly in the section on theory building with the purpose to explain the phenomenon of strategic initiative related dysfunctions in the context of renewing a firm's sources of competitive advantage. The classification of the research project within the area of theory building and explanation request specific methods accordingly. During the theory building process, the development of theoretically informed interpretations reflects one of the most powerful ways to bring reality to light. The development approach of the concept of strategic initiative related dysfunctions integrates the concept of grounded theory. The concept uses an inductive approach for theory building and represents '*a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon*' (Bogdan, 1975, p. 24). The process of theory development requires theoretical sensitivity which means the constant comparison of data and theory (Shortell and Zajac, 1990).

Another difference between theory testing and theory building is linked to the methods used. Surveys, simulations and experiments for data collection are mainly used by theory testing (Christensen, 1997). In comparison, the case study oriented approach of this study is mainly used for building theories. In the context of the present analysis, attention has already been drawn to the lack of theories and empirical evidence capable of depicting the processes of strategic initiative related dysfunctions. Hence, for the purpose of this research, case studies have been utilised in an effort to generate a theory capable of filling the gap in the literature.

### 3.1.3 Research Design: Case Study

#### 3.1.3.1 Introduction

Within the social science, case study methods are used in different ways with various philosophical and methodological aspects (Platt, 1988) depending on the researchers' views. It could become problematic to link phenomenology (interpretive) only to case studies and positivism to surveys (Eisenhardt and Bourgeois, 1988). Klein and Myers (1999) illustrate some examples that are consistent with the conventions of positivism (Smith and Grimm, 1987; Eisenhardt and Bourgeois, 1988). Case studies represent

one of the most common frameworks or research designs to conduct qualitative research, but it is not limited only to qualitative research (Mayer-Wittman, 1989). Moreover, there are numerous examples which illustrate the deployment of case study designing for the purpose of quantitative research (Platt, 1988).

### 3.1.3.2 The Advantages and Disadvantages of Case Studies

The advantages of case studies can be described via several aspects. Case studies offer flexibility due to the adoption of multiple data collection methods and they generate insightful stories instead of statistical information. Generating more insightful stories drives better understanding of organisational complexity from an insider's perspective. Through the case study approach, the researcher is able to develop a holistic perspective of the studied phenomenon (Eisenhardt and Bourgeois, 1988; Chwalowski, 1997) and in particular to explore a '*previously little-studied area*' (Smith and Grimm, 1987). Case studies can be applied to various social settings (Lynch, 1997). Nevertheless, case studies are often criticised for such issues. Those critics include generalization representational and validity in the findings of the qualitative approach (Tushman and Romanelli, 1985; Gummesson, 1991; Luffman, 1996). These issues are discussed in detail in the following sub sections.

#### 3.1.3.2.1 The Issue of Generalization

Using the case study approach, the researcher is aware of the fact that developing rich contextual data will not be sufficient to generalise the chosen phenomena into a concrete set of laws for measurement and prediction ( Platt, 1988; Platt, 1988; Mayer-Wittman, 1989; Fullan, 1991; Bruke and Litwin, 1992; Stake, 1995; Lynch, 1997). One argument is defined in the idiographic approach, which emphasises the understanding of social phenomena within a natural and individual case or event oriented environmental context. In opposition, an approach is nomothetic if it focuses on general statements that account for larger social patterns (Luthans and Davis, 1982; Gay, 2002) that form the context of single events or individual behaviour and experience. A second argument can be described through the way this research develops the theory. The theory is based on observations of the real world rather than solely on abstract reasoning – more a grounded theory approach. The formulation of

grounded theory is more a process of discovery that begins with extensive observation from which theory emerges over time. The process uses inductive reasoning, which begins with observations and builds more general statements from them over time. Further research is recommended in the literature before a theory reaches a certain degree of maturity or generality. Furthermore, it is commonly agreed that case studies help to generate theories and provide theoretical platforms for quantitative testing. Quantitative testing can then be used in a second step to enable generalisation.

#### 3.1.3.2.2 Issues of Validity and Reliability

There are four common types of validity, which are important for all social science research: construct validity, internal validity, external validity and reliability (Kidder and Judd, 1986). In general, validity can be defined as *'the accuracy and truthfulness of the findings'* (Altheide, 1997, p.487). Construct validity and reliability become the major concerns during the data collection processes; internal validity is the key during the data analysis stage; external validity is crucial to the research design (Altheide and Johnson, 1997). Yin (2003) provides a guideline to explain the need for different types of validity at various stages of research. Table 8 provides a guideline for ensuring validity and reliability and enables the researcher to check its case study oriented research approach, according to the requirements of each research stage.

Table 8: Case study tactics for four design tests (Yin, 2003).

| **Tests** | **Case Study Tactic** | **Phase of research in which tactic occurs** |
|---|---|---|
| Construct validity | - use multiple sources of evidence | Data collection |
| | - establish chain of evidence | Data collection |
| | - have case study report | Composition |
| Internal validity | - do pattern-matching | Data analysis |
| | - do explanation-building | Data analysis |
| | - do time-series analysis | Data analysis |
| External validity | - use replication logic in multiple case studies | Research design |
| Reliability | - use case study protocol | Data collection |
| | - develop case study data base | Data collection |

According to Yin (2003), during the preparation of data collection, a plan was shaped to address *construct validity* through the three recommended tactics. To address the issue of construct validity and to increase the spectrum of the data collection range, it was proposed to collect data from four different sources, which will be discussed later.

#### 3.1.3.2.3 The Issue of Triangulation

To address the issue of triangulation multiple methods are combined to generate empirical materials. The rationale behind this is to overcome the weaknesses or intrinsic biases and the problems that come from single method and single theory study. Triangulation reflects a process and provides the opportunity to enhance the validity and reliability (Denzin, 1970; Hitt and Ireland, 1985; Denzin, 1988) of the case study by increasing the trustworthiness of the data and the validity of the explanation of social phenomena (Patton, 1990; Kochan and McKersie, 1992). In this context, the purpose of triangulation is to obtain confirmation of findings through convergence of different perspectives. From the literature, four basic types of triangulation can be derived (Denzin, 1988; Patton, 1990; Smith, 1975; Yin, 2003): data triangulation, theory triangulation, investigator triangulation and methodological triangulation. The concept of triangulation applies the following aspects:

- Triangulation is a creative act and provides the opportunity to maximise the depth and breadth of data collection (Yin, 2003)
- Triangulation strengthens confidence of research findings (Denzin, 1988) and drives comprehensive understanding of the studied phenomenon (Schein, 1987; Corner and Wilson-Barnett, 1992; Payne, 1997)

However, triangulation does not resolve the contradictions created by different sources of data (Schein, 1987; Corner and Wilson-Barnett, 1992; Payne, 1997). However, some theorists argue that contradictory data often provide an additional source of creativity and can be used as a vital mechanism for expanding the researcher's thinking. Furthermore, some theorists (Henderson and Clark, 1990; Corner, 1991; Cowman, 1993; Powell, 1997; Kilmann and Herden, 1976; Kotter and

Schlesinger, 1979; Hunsucker and Loos, 1989) argue that triangulation enables the researcher to reconcile the opposing positions held by qualitative and quantitative methodologies.

## 3.2 Case Study: The Fieldwork Research Design

The following section describes various processes through which the proposed research objectives can be achieved. In light of the current methodological literature, especially the works of Eisenhardt (1989), Miles and Huberman (1994), Stake (1995), Strauss and Corbin (1990) and Yin (1984), a number of issues require attention: devising the case study protocol, selecting cases, conducting the case studies, collecting data from the field and data analysis. These issues divide into two major phases of the field research design.

Firstly, the preparation phase includes the rationale for the case company selected, outlining the criteria for its choice. This is followed by describing the details of the case study protocol, including the semi-structured questionnaire (see Appendix 1). Furthermore, the details of the single case study approach are described as the data collection approach, data collection procedures, data sources and data collection methods used. In addition the rationale for the selection of the three in-depth strategic initiative case studies and the reflexivity of the researcher are described.

Secondly, the data collection phase illustrates how the researcher designed and formulated the semi-structured interviews, gained access to the case sites and selected the interviewees for the pilot interviews and the lessons learned from the pilot interview schedule as a starting point for the three in-depth case studies (see the questionnaires in Appendix 1). Furthermore, the data collection phase illustrates the on-site observations and how the documentation was organised during this phase.

### 3.2.1 The Preparation Phase

The researcher selected Sun Microsystems, Inc. (Sun) as the case company, based on six unique characteristics of the case study company. Firstly, Sun needed to cope with an immense growth rate within a short period of time, which offered a unique

opportunity to study the development, evolution and complexities of existing company resource base impacts and resource re-configuration efforts. Secondly, the company had launched a large number of strategic initiatives to implement the firm's latest business strategies and directions. Therefore, Sun's environment provided an opportunity to study strategy making and related challenges in the context of strategic initiatives. Thirdly, the strategic initiatives launched by Sun covered a wide range of strategic objectives and strongly interrelated with each other in some areas. Fourthly, the strategic initiatives launched aimed to transform some of the company's core competencies, which were responsible for some of Sun's past successes. In this context, the company's strategic initiatives sought to impact on existing resources, capabilities, and the knowledge base of the company in different ways to implement the new strategies. Fifthly, Sun's strategic initiative portfolio included different types of initiatives due to their scale, area of implementation, change power, implementation time and starting point. This uniqueness of ongoing strategic initiative diversities provided an opportunity to study different types of ongoing strategic initiatives in the same organisational context. The six and final criterion was based on the researcher's previous employment with Sun and his personal company network which helped him access the necessary case study data. The researcher was able to access especially sensitive data and insider information on the company's actual strategy and strategic initiative implementation details.

#### 3.2.1.1 Shaping the Case Study Protocol

The case study protocol is the basic element in planning and conducting the strategic initiative related case study and it is used in this research project as a tool to manage the rules and procedures of a case study to enhance the reliability of the research (Lynch, 1997). Based on the nature of the case study approach that requires multiple data methods, the case study protocol helped the researcher select appropriate methods from the wide range of different methods available. The protocol describes and expresses why different sources of data are collected (Taylor and Bogdan, 1984). In the context of this study the protocol contained the sections: Introduction/Prerequisites, Data Collection Approach, Data Collection Procedures,

Case Study Questions, Outline Case Study Report in accordance with the recommendations of various scholars (Yin 2003), described in the following.

The *introduction* and *prerequisites* of the case study protocol consisted of a short introduction to the research project presented by the researcher to the interviewees and related discussion partners. The researcher prepared three slides to illustrate the research objective and purpose of the discussion. The introductory material was mainly used by the researcher at the beginning of every scheduled interview. Furthermore, every interview and on-site observation was prepared with a case study check list. Details on the introduction (purpose of the discussion) and prerequisites (case study preparation check list) are listed in Appendix 1, as those elements were mainly used in the context of the case study questionnaire.

To collect the data necessary for this research project, the researcher opted for the *data collection approach*, conducting the case study in two major steps, as outlined in Table 9. The first step collected first experiences with a pilot interview schedule, including observation of the company's strategic focus and latest business strategies in the context of the ongoing and planned strategic initiative implementation processes. The first step helped the researcher increase his understanding of strategic initiatives as the unit of analysis defined at an early stage and select the appropriate strategic initiatives for the planned in-depth case studies. The second step comprised the in-depth case studies of the three selected strategic initiatives: Sun Sigma initiative, CRM Convergence initiative and the Balanced Scorecard initiative.

One of the *data collection procedures* was carried out through a case study interview schedule, including the name of the interviewee, the company background and title, the interview group and the individual role and responsibilities of the interviewee. Furthermore the data collection procedures included the geographical location, email and telephone number, illustrated in Appendix 2 and briefly outlined in Table 9 in the section of data sources (Interview Groups and Roles/Responsibilities). The researcher also used a computer-based calendar (Outlook) to schedule on-site visits and interviews, including the invitation, confirmation and feedback on data collection

activities. For data privacy reasons the researcher excluded the interview schedule in Appendix 2, in particular the names of the interviewees, the email details, telephone number and the geographical location of the interviewee.

The *interview questions* were developed before the first interviews were scheduled and conducted (detail questionnaire in Appendix 1). The questionnaire was enriched over time and was refined according to the progress of the interviews conducted, and especially to the lessons learned by the researcher and follow-up feedback from the interviewees and discussion partner.

A *case study report* was developed and updated regularly for various purposes: firstly, to maintain the progress of the field work systematically and manage the preliminary findings of the research project; secondly, to establish a baseline for regular supervisions and research project milestones; thirdly, to manage relevant documentations and documented interview scripts which illustrated the used data format; and, finally, it was the protocol that included a log history, documenting the case study interview schedule and related progress as links of memos which illustrated the researcher's thoughts on the collected data and links to the papers of the preliminary and final findings. In summary, important details of the case study protocol are listed in Appendices 1-3 and in Table 9.

Table 9: Single Case Study Design Overview of Sun Microsystems, Inc.

| **Data Collection Approach** |
|---|
| Two Step Approach:<br>Step 1: General Company Case Study:<br>• Pilot-interview schedule: collect first experiences with the research approach and case study questions<br>• Observe the company's strategic focus and business strategies.<br>• Identify and select strategic initiatives for in-depth case studies.<br><br>Step 2: Three Strategic Initiative In-Depth Case Studies:<br>• Start with in-depth case study of the Sun Sigma initiative.<br>• Followed by two additional in-depth case studies, of the CRM Convergence |

initiative and the Balanced Scorecard initiative, for cross-in-depth case study comparisons.

In this context, the strategic initiative reflects the unit of analysis for the single case study of Sun Microsystems, Inc.

**Data Sources**

To increase the spectrum and data collection range and for triangulation purposes, the researcher identified the following important data sources. The researcher created an archive and index-list of the collected data, classified by data sources.

Documentation: collection of various public and non-public company presentations and documentations.

Internal: Non-public company documentation:

- Internal presentations
- Internal documentation on the intranet
- Internal studies

External: Public company documentation:

- Investor relations
- Various published articles/newspapers

Research reports, mainly Gartner Group, Forrester Research and IDC

On-site Observations: On-site observations included specific company meetings and events to increase the data collection spectrum. The researcher attended Sun Tone-Hall Meetings (Internal Company Announcements and Employee Updates), On-Side company presentations and selected meetings, round tables (including Business Apéros) and customer events.

Interviews: All the interviews conducted were recorded via voice-recorder and transferred to a written interview protocol. The protocol included the date of the interview; interviewee, interview-duration, history-table in case of interview iterations and the detailed interview text (refer to Appendix 2).

Interview Groups (Context):

- General Source: Key employee – involved in key programmes/initiatives
- Sun Sigma initiative: strong involvement in the initiative
- CRM Convergence initiative: strong involvement in the initiative
- Balanced Scorecard initiative: strong involvement in the initiative

Roles/Responsibilities (Case Study Perspectives):

- Line-of Business, Management / Decision Maker
- Initiative "customer" / representative

- Project / competence centre team – strategic initiative team

| **Data Collection Methods Used** |
|---|
| Interviews: Semi-structured interviews (refer to questionnaire section in Appendix 1). |
| On-site Observations: Attending company meetings and events. |
| Internal/External Documentation: Analysis, review of the classified documentation, including the use of mind-maps and cause-effect diagrams for the review of the documentation. |

In summary, the data sources and related methods outlined in this research protocol are, firstly, interviewing (Calder and Sheridan, 1984; Holstein and Gubrium, 1997) using semi-structured interviews; secondly, on-site observations conducted on selected company meetings and events (e.g. Sun Tone-Hall meetings), company presentations, discussion round tables, and customer events (Robson, 1993; Silverman, 1997; Yin, 2003); and, thirdly, documentation including public and non-public company information to enhance the richness of the data and increase the validity through triangulation (Burgess, 1982; Luffman, 1996; Dingwall, 1997).

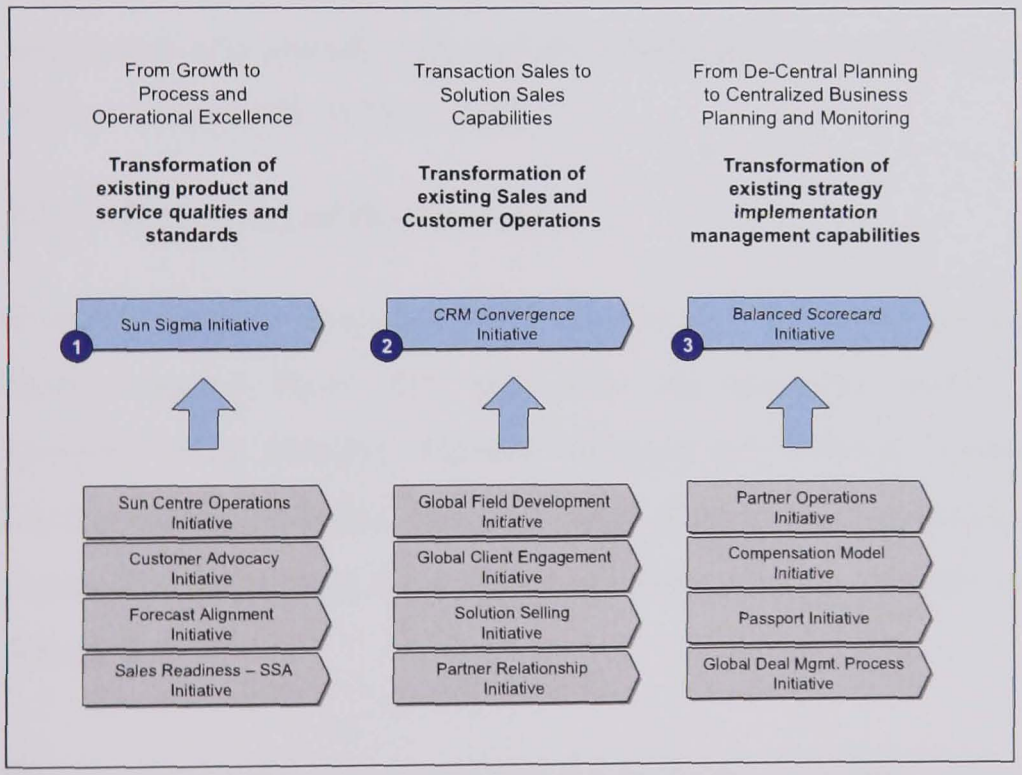
### 3.2.1.2 Selection of the In-depth Strategic Initiative Case Studies

To collect the data necessary for this research project, the data collection approach was organised in two major steps. As described in the previous sections and in Table 9, the first step collected experiences of the case study company, particularly relevant background information on the company's strategic focus and latest business strategies. Furthermore, the first step was necessary to identify and select the best candidate for the planned in-depth case studies, illustrated in Figure 3. Figure 3 shows the key initiatives of the company in implementing the latest business strategies and directions. In this regard, the selection of the strategic initiatives for an in-depth case study was based on two major steps.

Firstly, the strategic initiatives were classified into three different groups, according to the company's strategic business agenda. The first group of key programmes aimed at increasing Sun's top-line revenues and market shares. The best candidate for an in-depth study was the CRM Convergence initiative. This strategic programme aimed at transforming a wide range of different company areas in the firm's existing sales

capabilities and customer operations. The second group of key programmes was classified according to the company's strategic efficiency objectives – especially the improvement of current business processes and related quality standards. In this regard, the Sun Sigma was the best candidate for an in-depth case study. Sun Sigma was the largest initiative with many types of interrelations and dependencies to other ongoing strategic initiatives and Sun's organization. This context offered a broad spectrum to study the strategic initiative related tensions during the implementation process. The third group of key programmes related to Sun's objectives in improving its strategy execution process, especially the firm's current strategy management approach and capabilities. Within this group of strategic initiatives the Balanced Scorecard provided the best opportunity for an in-depth case study based on the objectives of implementing the firm's new business strategies and aligning the current ongoing activities and programmes with the new company directions.

Figure 3: Selected strategic initiative candidates for in-depth case study.




Secondly, the best strategic initiative candidates were evaluated according to six different key characteristics: strategic profile and relevance of the initiative, interrelations with the firm's organizational context, interrelations with other ongoing strategic initiatives, strong focus on strategy execution, scope to transform some of the company's existing core capabilities, and possible data access – in particular

confidential information. In this regard, the Sun Sigma initiatives aimed at improving and transforming Sun's current business operations to establish process excellence standards across the entire company. The initiative affected and impacted nearly every ongoing project and programme within the organisation. The CRM Convergence initiative sought primarily to change the way in which Sun approached its customers, and it affected nearly every ongoing programme and activity related to the firm's customer and market operations. The Balanced Scorecard initiative aimed at implementing the company's new business strategies and changing the way Sun was managing its business strategies. The initiative affected every major programme and strategy implementation process of the company. Based on the two selection steps and the validation criteria, the researcher selected the Sun Sigma initiative, the CRM Convergence initiative and the Balanced Scorecard initiative as the best candidates for the planned in-depth case studies. Two steps helped to enrich the overall study through the notion of '*controlled opportunism*'. According to Eisenhardt (1989), controlled opportunism is the way in which '*researchers take advantage of the uniqueness of a specific case and the emergence of new themes to improve resultant theory*' (Eisenhardt, 1989, p. 539).

#### 3.2.1.3 Reflexivity of the Researcher

It should be mentioned that the researcher had worked as an employee for the case study company. From 2001 until 2004, the researcher worked for the case study company as an Industry Business Manager and Strategy Implementation Manager EMEA (Europe, Middle-East and South Africa) for the business development and corporate development departments in Zürich, Geneva, and the Headquarters in Palo Alto, US.

The researcher left the company at the beginning of 2004, before the data collection and data analysis for this research project started. The researcher's previous history and relationships with the company offered unique advantages for the research project. Firstly, the researcher was able to access confidential and non-public data on strategic initiatives. Furthermore, the researcher was able to access key employees to collect relevant and critical data, especially for the in-depth case studies, and interpret

company specific phrases and jargons. However, the researcher was aware of his previous relationship with the company and defined different strategies to avoid potential bias.

Firstly, following the recommendations of Yin (2003), the researcher continuously tested the degree of being open to contrary findings. During the data collection period, the researcher selected critical colleagues inside and outside the case study company to report and continuously discuss the meaning of the collected data and his preliminary findings during the analysis stage. Ex-colleagues and interviewees offered alternative explanations and suggestions for the data collection and searched for contrary findings which sometimes produced documentable rebuttals and guided the researcher in his next data collection plans. Furthermore, the strategy of critically reviewing the preliminary findings was strengthened by regular supervisor meetings during the data collection period. Secondly, the tolerance of the researcher towards contrary findings was regularly tested and the researcher sought alternative and contrary explanations to his preliminary findings and documented them through memos. After discussing the findings with selected colleagues, the researcher compared his memos with the outcomes of the critical review sessions to understand if the likelihood of potential bias had been reduced. Thirdly, the researcher selected different data sources for identical or similar topics during the data collection period to compare them and derive possible explanations contrary to his own memos and critical review discussions with selected colleagues regarding the data meanings and his preliminary findings. Fourthly, the researcher used the on-site observation technique, since one of the major problems occurring with this technique is potential bias. In this context, the researcher used the rule of 70% minimum listening and maximum 30% asking questions with the group or individual.

### 3.2.2 The Data Collection Phase

The main purpose of this section is to describe how the research site was accessed and how the data access was established and different data collection methods, especially interviewing, on-site observations and documentation were employed, to implement the research design and obtain the answers needed to fulfil the research objectives.

The integration of the data collection methods and the problem of ensuring the validity of multiple sources of data will be discussed in the following sections.

### 3.2.2.1 Designing the Interviews

The following section describes how the researcher designed the interviews. At this stage, the researcher had already accessed company data for the interview design process described below. Furthermore, the interview design was a continuous process within this research project, and it was reviewed periodically by the researcher based on the feedback and lessons learnt during the data collection period. There exists a wide range of interview types based on the degree of interview structure and the nature of the interview questions (Jones, 1985). It ranges from predetermined questions and standardized schedules, commonly known as structured interviews, to unstructured interviews in which the interviewers have a general area of interest. The interview process is characterized by the flow of conversation (Powney and Watts, 1987). Integrating aspects from structured and unstructured interviews gives rise to semi-structured interviews. Semi-structured interviews include a clearly defined purpose with some degree of flexibility in the wording and ordering of questions (Robson, 1993). Furthermore, all types of interviews can be classified into two different groups according to the type of questions (Jones, 1985). Interview questions can be categorised as open-ended or closed (Robson, 1993). Interviews can be in-depth interviews or survey. In-depth interviews are used to collect detailed insights from individual interviewees and survey interviews aim to achieve a broad coverage of the population (Jones, 1985; Powney and Watts, 1987).

According to the research purpose of understanding how Sun employees (social actors) constructed, categorised and interpreted events in their world, the researcher designed semi-structured and in-depth interviews (Jones, 1985; Powney and Watts, 1987). Furthermore, integrating the suggestions of Corbin and Strauss (1999), the researcher included four different types of question (data-oriented, process-concept oriented, practical-theory-structural oriented, and guiding questions) to cover contextual aspects of the theory building process. This approach has the important advantage of providing the flexibility which is needed in the field of theory building

and modification. Furthermore, for the interview preparation, the researcher collected information on the company's current business strategies, current strategic initiatives, latest information from archival records, and public/confidential documentation in order to be aware of Sun's current issues and enhance the formulation of appropriate interview questions.

To select the strategic initiatives for the planned in-depth case studies and for a better understanding of Sun's current business strategies, the researcher decided to start with pilot interviews. The selection of the interviewees was based on the need for the responses to be able to reflect the reality constructed by the whole (Smith, 1975; Eisenhardt, 1989). The researcher's personal experience with the company was useful within the preparation stage of the different interviews. The researcher received from his personal network information on new strategic initiatives activities and results, relevance of new key-employees and general updates on the company's existing business strategies and their implementation process. In this context, pilot interviews were planned to enhance the validity and appropriateness of the collected data (Yin, 2003).

Six pilot interviewees from the four different interview groups were selected: three key employees, who were strongly involved in several strategic company programmes and initiatives and one employee from each potential in-depth case study initiative (Sun Sigma initiative, CRM Convergence initiative and the Balanced Scorecard initiative). Moreover, the interviewees were selected according to their experience with Sun's strategy implementation processes, strategic initiative involvement within the company and their willingness to participate in the research (refer to the pilot interview schedule in Appendix 2). The pilot interviews helped to articulate critical issues for inquiry and to enhance the formulation of appropriate interview questions for further planned interviews.

#### 3.2.2.2 Enabling the Data Access

To collect relevant data, the researcher approached different sites in Switzerland, Germany, Spain, France, the United Kingdom, and the USA to conduct interviews

with the interviewees identified, who were classified into four major groups, according to the case study design. Furthermore, for the case site, the researcher approached Sun Microsystems Inc., sharing the researcher's prior working experience within the company and based on the unique research environment to explore the chosen research topic (Strauss and Corbin, 1990). The process of gaining access began in October 2004 and ended in June 2007. During the data collection period, the researcher attended company related meetings, accessed different sources of documentation and arranged several meetings with the three different groups of interviewees (Line-of Business, Management / Decision Maker, Initiative "customer" / representative, Project / competence centre team – strategic initiative team) through several direct telephone calls, followed by additional telephone and face-to-face interviews. After the pilot interview schedule, the researcher extended the case study interview list (refer to Appendix 2) and arranged participation in specific company events like the firm's tone hall meetings, customer events and company meetings for planned on-site observations.

#### 3.2.2.3 Lessons Learned from the Pilot Interviews

The lessons learnt from the pilot interviews can be summarised in four aspects. Firstly, the pilot interview round gave the researcher confidence that the strategic initiative was appropriate as the unit of analysis. Secondly, the pre-selected strategic initiatives (Sun Sigma initiative, CRM Convergence initiative and the Balanced Scorecard initiative) could be confirmed for the planned in-depth case studies. Thirdly, the pilot interview schedule helped the researcher to test and reshape the interview questions in order to avoid using theoretical terms, such as resource prioritisation, causal ambiguity etc., with which most of the interviewees were unfamiliar. The researcher changed the questions into more open and business related ones to increase the understanding of specifics and provide the opportunity to include the individual perspectives of the interviewees in the interview process (Jones, 1985). Fourthly, the pilot interview schedule was useful in identifying additional candidates for further interviews, events for on-site observations and indications of additional company documentations, based on the feedback from the interviewees. In addition, the on-site observations and the case study interview schedule required flexibility

from the researcher according to the time schedule and the place where the interview should be conducted. Furthermore, often, non-public documentations were handed over to the researcher personally, which required additional visits from the researcher to the case study company.

In summary, the pilot interviews and latest information from archival records and documentation provided helpful input to understanding the current situation and preparing the interview questions and conducting the interviews for the in-depth case studies. Furthermore, the piloting interview questions enhanced the validity and appropriateness of the data collected in later interviews by enhancing the interview questions, according to the received pilot interview feedback (Glesne and Peshkin, 1999).

### 3.2.2.4 Conducting the Interviews

The researcher conducted interviews with the key-employees from each group (Line-of Business, Management / Decision Maker, Initiative "customer" / representative, and Project / competence centre team – strategic initiative team), especially in the context of the in-depth strategic initiative case studies. Based on the pilot interviews and the lessons learnt, the researcher formed the three interview groups, as outlined in Table 10.

Table 10: Overview of the three interviewee groups approached.

| Interviewee Group | Description |
|---|---|
| Line-of Business, Management and Decision Maker | This group mainly included the executive management team members who played an important role in initiating, configuring, energising, deciding and terminating strategic initiatives to allocate and re-allocate company resources. Interviews were conducted with different company executives from different lines of business like the Global Sales Organisation, Global Support Organisation and the Professional Services Organisation. Moreover, former executives were interviewed to increase the evidence of data sources. The executive team members helped to |

| | |
|---|---|
| | describe and analyse the data from a company's management perspective. |
| Initiative "customer" and Customer Representative: | This group of interviewees related to strategic initiative execution and key program management. The various strategic program managers and key team members provided insights into how Sun as a company implemented its strategies by executing various strategic key initiatives. The program execution teams enriched the data from a company transition management point of view. Additional details on the strategic initiative implementation and transformation process and upcoming challenges were collected. |
| Competence Center Team – Strategic Initiative Team: | The third source represented a number of communities which may have been affected or impacted by various strategic company resource transition efforts. Representatives from various business lines were able to provide additional insights on how different strategic change initiatives were recognised by the wider organisation. The group could increase, for example, understanding on the general perception, acceptance, resistance, challenges etc. of different company programmes and activities. |

The sequence of the individual interviews rotated between the three different interview groups to identify relevant effects, focal points and patterns across the different groups. The interview rotations between the three different groups provided an opportunity to include the lessons learnt from the previous interview schedules for each group.

Each individual interview was scheduled for 2 hours and lasted between 1 and 3 hours. After interviewing each individual, the researcher used the snowball technique, asking the interviewee to recommend additional individuals and documents for additional interviews and reviews. Moreover, the researcher asked each individual interviewee why he or she recommended the additional individual to increase the understanding of individual relations.

Overall, it was agreed that each interviewee would receive a written interview transcription to invite their feedback on the content and make additional comments. Interviewees received their transcripts via email and were asked to go through the content memos drafted with the researcher in a second step. Additionally, the researcher drafted memos after some key feedback cycle with the interviewee. Memos reflected the researcher's thoughts, interpretations, questions, and directions for further data collection and provided assurance that the researcher was on the right track.

#### 3.2.2.5 On-site Observations

On-site observations are a helpful approach for the researcher to understand and interpret the social actor's world. Social settings of the phenomenon researched play a vital role in understanding the researched topic (Robson 1993; Altheide and Johnson 1997; Hunt and Benford 1997; Silverman 1997; Yin 2003). Social settings can be linked to the specific epistemological assumptions of the researcher. Ontological and epistemological assumptions determine how the nature of reality is perceived and how knowledge of the reality can be obtained. On-side observations were used to observe how different groups of people discussed and represented achievements of strategic initiative implementation. In this context, the researcher attended the company's specific Tone-Hall Meetings in Zurich and London. Tone-Hall Meetings are organised by the company on a regular basis to communicate and discuss the latest news about and achievements of the company. During the researchers data collection period different topics on the Sun Sigma initiative, CRM Convergence initiative and the Balanced Scorecard initiative were communicated and discussed: in particular, achievements, changes, challenge and future plans of the specific initiative. Furthermore, on-site observations were conducted in the corporate office at Paulo Alto/Santa Clara - California (USA). The researcher participated in selected round tables where Sun's strategic direction were presented and discussed. In this context, the researcher was able to listen to different employees on Sun's strategy implementation, review internal documentations and clarify understanding on different written and verbal meanings. Notes were taken during each individual

observation and further reflections were written up soon after the researcher had left interactions with the observed organisation. Informal discussions with some of the organisational members during coffee- and lunch-breaks proved to be especially valuable because individual employees were often more willing to express their personal viewpoints at these times rather than during the formal meetings and company presentations. The researcher's working experience and personal trusted network were helpful in collecting additional important and sensitive data. This enabled the researcher to recognise the differences between the stories told by the same interviewees on different occasions.

#### 3.2.2.6 Documentation

The researcher collected various public and non-public company presentations and documentation, such as published articles and unpublished management presentations, commentaries on the company, and different company investor relations materials. Those materials were necessary to increase the researcher's company understanding and support the researcher's case study interviews and analysis.

Documentation includes letters, written reports, administrative documents, newspapers and other relevant studies (Hunt and Robert, 1995; Miller *et al.*, 1997a), and it is used to address the data triangulation because it can corroborate and augment evidence from other sources. A systematic search of documents is vital ( Katz, 1983; Easterby-Smith *et al.*, 1991). Therefore, documentation was collected from various company sources guided by the recommendations and suggestions of the interviewees. The indications of different interviewees helped the researcher to collect the documentation from various company sources and put them together in the right context (Stake, 1995). To manage the wide range of documents the researcher created a documentation database for each case. The database contained documents from different periods, which were classified, compared and commented by the researcher's individual thoughts.

## 3.3 The Data Analysis and Interpretation Phase

The following section describes the processes through which data analysis and interpretation led to the generation of the new concept of strategic initiative related dysfunctions. Firstly, it illustrates the different types of coding methods used, namely open coding, axial coding and selective coding (Glaser and Strauss, 1967; Strauss and Corbin, 1990; Stake, 1995). The coding methods were applied to reduce, organise and compare the data collected mainly from the three strategic initiative in-depth case studies. Secondly, it illustrates how a theory of dysfunctional effects in the context of strategic initiative implementations was generated from the data analysis, cross-case study comparison and interpretation results. Finally, this section also discusses the issues of literature comparison, validation and thesis writing.

### 3.3.1 The Coding Processes

The large amount of data collected through interviewing, on-site observations and documentation led to the danger of '*drowning in data*' (Boeker, 1989). To avoid this danger, the researcher followed Strauss and Corbin's (1998) recommendations to break the coding process down into a series of activities. According to Strauss and Corbin (1998), the researcher approaches the series of coding activities through three sequential stages: open coding, axial coding, and selective coding. The researcher expected to apply the grounded theory to the strategic initiative case study analysis to include fluid, ambiguous and context dependent meanings emerging from the interaction of the social actors (Strauss and Corbin 1998; Locke 2001).

#### 3.3.1.1 Open Coding

The researcher started by using open coding to identify the concepts and their properties and dimensions based on the collected data. Concepts are central ideas of the phenomenon represented through the data and are the building blocks of a theory. Concepts are labelled 'phenomena' and can be classified into different categories. Each category can have specific characteristics, called properties, which are relevant to defining the meaning of a category. Firstly, the researcher documented each individual interview and on-site observation on a script. In detail, a script comprised

documented interview scripts, memos, notes and mind-maps from on-site observations and follow-up interview feedback and collected the documentation about the case company. Secondly, the researcher went through the scripts in a line by line analysis to identify relevant concepts. Useful examples of the line by line analysis are illustrated in Appendix 19.1. (the open coding examples). The examples in section A1, A2, A3 and A4 of Appendix 19.1 outline the researchers' line by line analysis (the blue comments within brackets in the interview scripts) of the documented scripts, which reflect the identification of the relevant concepts and their properties. After conducting the line by line analysis, the researcher summarised the identified concepts and properties into logical groups, as illustrated in Appendix 19.1 section B1 and B2. Thirdly, the researcher indexed the concepts to establish a link between the findings and the different data sources (e.g. interviews, memos from on-site participation and documentation) to verify the connection between the data source of every concept emerging at any time of the analysis stage, illustrated in Appendix 19.1 section B1. The researcher identified over 331 different concepts which evolved iteratively, based on the line by line analysis of the different scripts emerging during the data collection process. Fourthly, the researcher compared and merged similar concepts to a group of 141 different concepts, illustrated in Appendix 19.1 section B3. In this context, the abstraction of the data sources into concepts enabled the researcher to apply a comparative analysis of the different concepts through the identification of common characteristics across the concepts and define groups to enrich the open coding process. Furthermore, conceptualising, including grouping and abstraction of the data, was helpful in reducing the large amount of data to smaller, more manageable pieces. Fifthly, after grouping the identified concepts into smaller and more manageable pieces, the researcher abstracted the data into common patterns, processes and structures (Anderson *et al.*, 1995). The abstraction of common patterns, processes and structures, including the classification of events, objects, or actions/interactions, was the first step in building the new theory of strategic initiative related dysfunctions. A classification of actions/interactions of Sun Sigma implementation related dysfunctions is illustrated in Appendix 19.1 section B2. Finally, the researcher analysed how the identified concepts (categories) varied dimensionally along those properties and identified patterns, such as patterns of

strategic initiative interactions, how strategic initiatives interacted with the organisational context, and how strategic initiatives interacted with other ongoing strategic initiatives or challenging effects of strategic initiative implementation. The step of identifying patterns as illustrated in Appendix 19.1 section B2 (dysfunctional effects of Sun Sigma implementations) was the foundation and beginning of the theory building process of this study. In summary, open coding technique was used for content analysis and helped generate categories suggested by the data rather than imposed by other theories (Agar, 1980).

### 3.3.1.2 Axial Coding

The second stage of the interpretation and analysis was based on the concept of axial coding. After all the data had been examined and categorised by the researcher, the axial coding was applied to relate categories to their subcategories. In this context the term "axial" is used because coding occurs around the axis of a category, linking the categories at the level of properties and dimensions (Strauss and Corbin, 1990; Stake, 1995). Additionally, axial coding includes the identification of structures and processes. A structure is the conditional context in which a category (phenomenon) is situated. In comparison, a process describes the sequences of action/interaction pertaining to a phenomenon as they evolve over time. To arrange various categories and sub-categories, the researcher focused the axial coding on the connections between categories to cover as much of the data as possible in order to produce a comprehensive scheme. Appendix 19.2 illustrates how the researcher started to conceptualize the connections between the categories to shape the main concept, illustrating the examples strategic initiative implementation (section C1) and challenging initiative implementation effects (section C3). This iterative approach generated a new set of interconnected categories with related concepts that highlighted various activities of strategic initiative implementation in the context of strategic initiative related dysfunctions, influencing factors and relevant processes of a company. Finally, the researcher developed the structure between the categories to shape the main category. This fulfilled the requirements of multi-level analysis in studying the dynamic relations between processes and structures (Pettigrew, 1990). To structure the categories and link related subcategories to the category, the

researcher used tree-root-structures, illustrated in Appendix 19.2, through the two main concept examples of strategic initiative implementation (section C2) and challenging initiative implementation effects (C4). During the axial coding process, the researcher pursued the goal of systematically developing and relating categories. Finally, the researcher identified 17 main categories, as outlined in Appendix 19.3. This was the next step in building the theory within this study. At this stage, the researcher started to apply the paradigm model to look for answers to different questions, such as why, where, when, how, and with what results, and in so doing he was able to uncover the relationships among categories. The paradigm model is nothing more than a perspective taken towards the data, an additional analytical stance that helps the researcher systematically to gather and order the data in such a way that the structured processes are integrated (Turner, 1983).

#### 3.3.1.3 Selective Coding

Selective coding reflected the process of developing and refining the theory of strategic initiative related dysfunctions by integrating the different categories. The first step was the choice between a central or core category. The central category evolves from the research and was selected by the researcher according to the following criteria.

Table 11: Criteria's for choosing the central category (Strauss and Corbin, 1998, p. 147)

| | |
|---|---|
| 1 | It must be central; that is, all other major categories can be related to it. |
| 2 | It must appear frequently in the data. This means that within all or almost all cases, there are indicators pointing to that concept. |
| 3 | The explanation that evolves by relating the categories is logical and consistent. |
| 4 | The name or phrase used to describe the central category should be sufficiently abstract that it can be used to do research in other substantive areas, leading to the development of a more general theory. |
| 5 | As the concept is refined analytically through integration with other concepts, the theory grows in depth and explanatory power. |
| 6 | The concept is able to explain variation as well as the main point made by the data; that is, when conditions vary, the explanation still holds, although the way in which a phenomenon is expressed might look somewhat different. One also should be able to explain contradictory or alternative cases in terms of that central idea. |

Appendix 19 outlines the final stage of the iteratively evolved paradigm model according to the case studies conducted. Based on the data collected, the commitment to the central strategic initiative related dysfunctions was made and all major categories were related to it through explanatory statements of relationships. The researcher used the technique of writing a storyline based on the evolved and final paradigm model, outlined in Appendix 19.3. Additional diagrams, like those illustrated in Appendix 19.1 and 19.2, were useful to the researcher in facilitating the integration process. The researcher brought the iterative analysis to an end after reaching the point in the category development at which no new properties, dimensions, or relationships emerged during the analysis, defined as '*theoretical saturation*' (Turner, 1983; Martin and Turner, 1986). Theoretical saturation was used to bring the iterative analysis between the data and concepts to an end. According to Strauss and Corbin (1990), this is the stage where no new data seem to emerge in relation to a category, the category is fully developed and the relationships between the main categories of strategic initiative related dysfunctions are well established and validated. However, even within patterns and categories, there is variability between different people, organisations, and groups falling at different dimensional points along some properties. In writing about the new theory, the researcher used the concept of variability to bring out the variations both within and between categories. Nevertheless, even the theoretical achievement of saturation does not mean that the data analysis and interpretation processes have been completed. The following section highlights the importance of comparing the current literature with the emerging theory, used in this study.

### 3.3.2 Case Study Analysis Approach

The analysis of this thesis was not separated from the data collection and coding process as the main feature of building the new theory of strategic initiative related dysfunctions from the case studies, based on frequent overlaps of data analysis with data collection (Eisenhardt, 1989). During the data collection process, the researcher was simultaneously analysing the preliminary findings as emerging concepts and categories outlined in Appendix 19.1 section B1, thus mixing collection with analysis. Through the coding process, the researcher was able to reduce the huge amount of

data by analysing the three strategic initiative case studies in two different steps, according to the suggestions of Eisenhardt (1989) and Turner (1983).

Firstly, the researcher analysed each single initiative. Initially, the analysis focused on understanding each strategic initiative separately. The reason for this was to reduce the amount of data to that concerning a single strategic initiative, described by Eisenhardt as a "within-case analysis". The primary aim was to increase the understanding of the patterns and findings of a single case, before looking at patterns across the different strategic initiative case studies. The scripts and documentation relating to the single strategic initiative were reviewed several times and coded into different interconnected concepts before the researcher discussed the findings with key people of the strategic initiative to verify that the case description and findings were a fair representation.

Secondly, the researcher compared the three strategic initiative in-depth case studies to detect general patterns, described by Eisenhardt (1989) as a cross-case search for patterns. Initially, the strategic initiatives were analysed by comparing the different single initiative results and summaries of the separate initiatives and grouping them together into similar categories as types of strategic initiative related dysfunctions, illustrated in Appendix 19.2 section C4. Every major concept from each strategic initiative was cross-compared and summarised. Following that, the researcher reviewed the scripts of each strategic initiative again to check and compare the summarised categories with the different transcripts and selected documentation and to determine whether any important information had been overlooked. Furthermore, this was discussed with key persons from the case company in separate sessions. Finally, two aspects are illustrated in the following sub-sections which reflect important aspects of the analysis phase of this study: the literature comparison and lessons learnt from applying the grounded theory to this study.

#### 3.3.2.1 Literature Comparison and Issues of Validation

After open, axial and selective coding in an advanced stage, the researcher started with the literature comparison. As a logical follow-on from finalising the selective

coding, a broad range of literature was intensively compared with the new theory of strategic initiative related dysfunctions. The purpose of this comparison was to ensure that the new theory would have a '*stronger internal validity, wider generalisability and higher conceptual level*' (Eisenhardt 1989, p. 544). The literature comparison helped to identify conflicting literature to increase confidence in the findings and to exploit more alternatives in analysing and interpreting the data (Glaser and Strauss, 1967; Strauss and Corbin, 1990; Stake, 1995).

In summary, the researcher sought to increase the validity and reliability of the theory generated by applying well-constructed procedures of data collection and analysis to the study. The purpose was that the new theory of strategic initiative related dysfunctions would reflect the uniqueness of the case and generalise patterns from the analysis of the three strategic initiative case studies (Anderson *et al.*, 1995).

#### 3.3.2.2 Lessons learnt from applying the Grounded Theory

Applying the grounded theory to a theoretically underdeveloped area as strategic initiative related dysfunctions raised different challenges for the research project. Firstly, the research project might fail to address the methodological adequacy, limitation and contribution of using such an approach for the chosen research area. Secondly, this study iterated between data and emerging theory. The challenge of such an approach is that it may fail to recognise the need to incorporate data analysis techniques into the iteration process (Orlikowski, 1993; Locke 2001). In other words, conceptual reliability and theoretical validity are enhanced not only through continuous questioning and comparing the data and findings (Strauss and Corbin, 1990); more importantly, there is a need for continuous iteration and evaluation between the data, findings and analysis techniques. Thirdly, the grounded theory approach comprises the challenge of ambiguity and lack of clarity in terms of how the data collected are transformed into the theory.

The researcher addressed the challenges of the grounded theory in different ways. The first was to develop and outline the lessons learnt from applying the grounded theory within the context of this study. The data were collected mainly through interviews,

on-site observations and documentation, which were analysed systematically regarding the concepts of open coding, axial coding and selective coding (Glaser and Strauss, 1967). The iteration between the data and the concepts helped the researcher not only to generate categories and sub-categories, but also to identify the potential links between categories, as illustrated in Appendices 19.1 and 19.2. The huge number of different links could be managed in this study through tree-root-structures, grouping and mind-maps; examples as strategic initiative related dysfunctions are illustrated in 19.2 section C4. Computer-based mind-maps include the functionalities of versioning which allow the capture of the history of iteration between the data and emerging theory to illustrate the changes as a baseline for continuous evaluation between the data, findings and analysis techniques. Moreover, the researcher iterated the data, emerging themes and theory with the data analysis techniques to ensure that the taken-for-granted rules and assumptions were minimised. In this context, the researcher used different data analysis techniques in different stages to avoid establishing the taken-for-granted rules and assumptions. As already mentioned in previous chapters, the researcher raised questions like the following: Who? When? Why? Where? What? How? How much? With what results? Those questions were useful for the researcher when the analysis stagnated and nothing could be assumed as the standard way to explain the phenomena. During the line-by-line analysis (examples are outlined in Appendix 19.1), the researcher scanned the script, or at least a couple of pages of it, and then returned to focus on a word or phrase that struck him as significant and analytically interesting. This technique was useful to raise questions about possible meanings instead of those assumed by the researcher. Furthermore, the researcher used the technique of comparison. This involved comparing categories of individual strategic initiative case studies to similar or different concepts to bring out possible properties and dimensions when these were not evident to the researcher. The comparative technique was especially useful for developing the new theory. In his follow-up interviews with the interviewees or discussion partners, the researcher used opposites or extremes of the topics discussed. For example, during the interviews, the CRM Convergence achievements were discussed and mentioned by the interviewees several times. Those achievements were challenged by the researcher. The researcher claimed in the follow-up discussion that the achievements were not visible because

the company was still in a challenging market situation. This approach helped the researcher to bring out significant properties relating to CRM Convergence initiative implementation challenges. Additionally, the researcher compared the data analysis and interpretation with the current literature. The purpose of this activity was not only to compare the emergent theory with similar theories, but also to contrast the emergent theory with conflicting literature in order to ensure internal validity (Yin, 2003). Additionally, the literature comparison constantly served as a vital source of theoretical creativity. The final point to be mentioned is that the researcher validated at an early stage a computer-based programme for the qualitative analysis (ATLAS for Windows). The researcher decided that he would still use papers, pencils, scissors, glue, bundles of memos and index cards, and posted walls with coloured flip charts alongside his computer-based programmes to inspire creativity.

## 3.4 Thesis Writing

The first stage of the writing process started with the stage of open coding, focusing on producing a detailed descriptive account of the case study. During the writing process of open coding, axial coding and selective coding, the researcher produced different content. To document, validate and discuss that different content, several case study reports were sent via email (approximately every 8-12 weeks) to different key people in the case company. The feedback was included in further versions of different working documents to improve the quality of the content and track the changes in writing and thinking.

Alongside the writings, the researcher decided to use a brainstorming approach, according to Phillips and Pugh's (1994) recommendations. Brainstorming is helpful for putting down all the main points and ideas that come into the researcher's mind. The brainstorming approach can be useful to extend creativity during the axial coding process, from Strauss and Corbin (1990). Additionally, a brainstorming folder was created to write down all necessary ideas which might be included in a final document but which does not specify the order in which they might be presented. Secondly, the researcher used visual maps. Visual maps become very helpful once the researcher had constructed a mind map in the most appropriate structure (Van Maanen, 1983;

Phillips, 1987). Then the next step was to proceed to construct the points into grammatical paragraphs made up of well balanced sentences. The researcher did this a chapter at a time, followed by organising the points into each of the sections in the chapter, and then concentrated on writing the paragraphs. To write up the complete thesis, the following timetable illustrates the main chapters and tasks of the researcher's plans.

Table 12: Required time to write up the final Ph.D. thesis

| ***Chapter or task*** | ***Number of weeks*** |
|---|---|
| Introduction | 5 |
| Literature review | 9 |
| Methodology | 6 |
| Results | 5 |
| Analysis and Discussion | 7 |
| Conclusions | 5 |
| Tables, figures, references, appendices etc. | 2 |
| Conclusion with supervisors and/or others and revisions | 5 |
| Editing, proof reading and binding | 4 |

The table above illustrates a breakdown and implies that some preliminary work has been done; for example, most of the references were known and listed, and some of the diagrams were drawn up and were ready to be incorporated, including the finalisation of the analysis and results.

## 3.5 Conclusion and Limitations

This section discusses various methodological issues and specifics which relate to this study. The study was built on a phenomenological paradigm. This phenomenological oriented study stresses the subjective aspects of human activity by focusing on the meaning, rather than the measurement, of social phenomena. There is no reality independent of the researcher's mind. Hence, what is researched cannot be unaffected by the process of the research.

The aim of the paradigm is to deal with the process of generating theories. From the start, generating a grounded theory was the aim of this research work and increased its capacity to explain strategic initiative related dysfunctions in the context of strategy

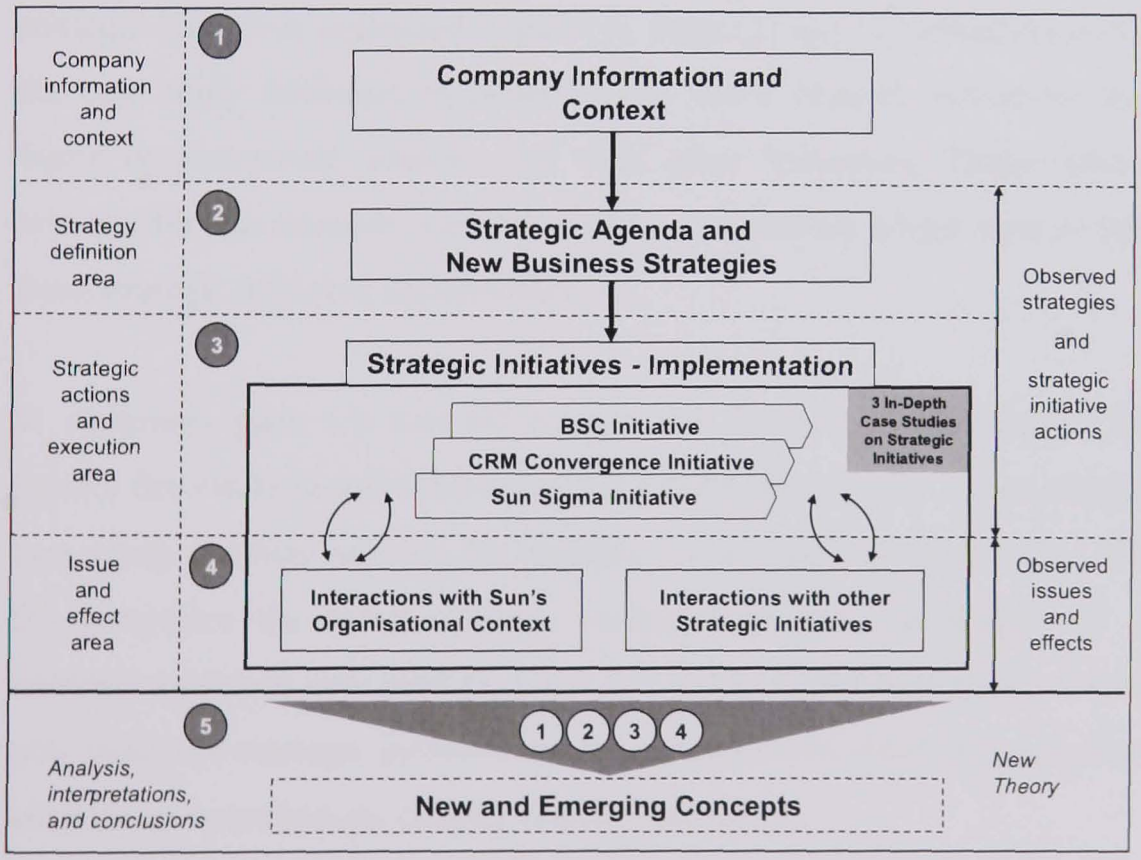
making. In comparison, the phenomenological approach generalises from one setting to another and does not generalise from sample to population. Hence, further research will be required to increase the reliability of the research findings. Under the phenomenological paradigm, the criterion of reliability may be given less status, or it may be interpreted in a different way. It is unimportant whether the qualitative measures are reliable according to positivist rules, but rather whether similar observations and interpretations can be made on different occasions and by different observers.

To ensure the internal consistency of the thesis, the seminal works of Glaser and Strauss (1967), Yin (1984), Miles and Huberman (1984), and Eisenhardt (1989) were used as guiding principles to shape the research design and use case studies for theory building. A case study is an extensive examination of a single instance of a phenomenon of interest and a core element of this phenomenological methodology. Generative accounts of using case studies for theory building provided a useful guideline for shaping the research design (Miles and Huberman, 1994). The choice of the case study method provided not only flexibility in adopting multiple data collection methods, but also the ability to articulate insightful stories embedded within the organisational context. In this context, the researcher addressed the challenges by setting boundaries on the case study through the construction of the case study protocol clarifying necessary boundaries, relevant procedures, and by enhancing the reliability of the chosen case study (Lynch, 1997).

# 4 Fieldwork: Case Study Company Overview

This chapter illustrates the fieldwork, starting with relevant company background information regarding the fieldwork conducted and followed by the three selected initiative in-depth case studies; the *Sun Sigma initiative*, the *CRM Convergence initiative* and the *Balanced Scorecard (BSC) initiative*. The preparation and planning of the case study fieldwork started in October 2004 and finished in June 2007. The selected initiatives were based on established managerial practices and represented a strategic key profile of Sun's strategy execution efforts. All of them provided supportive criteria to investigate how strategic initiatives interrelated with Sun's sources of competitive advantage, especially for observation of which kind of effects emerged during the transformation of Sun's actual resource and capabilities. Figure 4 outlines the organisation and structure of the case study fieldwork.

Figure 4: Case Study Organisation (Structure).




The figure illustrates the five major parts of the fieldwork, which are equivalent to the organisation of this section. Part (1) and (2) of the case study describes the company and provides relevant background information for the case study reader. In detail, Part

(1) illustrates the firm context and why Sun Microsystems, Inc. started to renew its existing resources and capabilities to sustain competitive advantage. The second part (2) relates to "Sun's Strategic Agenda and New Business Strategies", in the context of strategic initiatives. Sun Microsystems, Inc. mainly tried to implement its defined strategic directions and changes by defining and launching different strategic actions. Those strategic actions gave rise to different strategic initiatives, which were conceptualised and launched to implement Sun's strategic agenda and business strategies outlined in part (3). Part (3) is focused on "Strategic Initiatives" and provides general information on Sun's different strategic initiatives, outlining the characteristics of them. In particular, the organisational context of the strategic initiatives and the structure and approach of Sun to launch and manage the different planned and ongoing initiatives to execute the defined strategies are illustrated in the last sub-section of the case study: company introduction. Moreover, part (3) outlines the main parts of the fieldwork – the three in-depth initiative case studies, including the interaction with Sun's organisational context and interaction with other ongoing strategic initiatives organised in part (4). Parts (3) and (4) reflect the detailed scope of the case study fieldwork to observe how Sun's strategic initiatives interacted with Sun's organisational context and with other initiatives. These interactions were relevant for the research work to identify and discuss which kind of effects emerge from strategic initiative implementation.

In summary, parts (3) and (4) contain the three in-depth strategic initiative case studies described in individual chapters of this dissertation. Those strategic initiative case study chapters provide the baseline for the case study analysis. Therefore, part (5) comprises the interpretations, comparisons and conclusions of the in-depth strategic initiative case studies which led to the conceptualisation and design of the new theory of strategic initiative related dysfunctions, illustrated and discussed in the analysis and conclusions chapter of this dissertation.

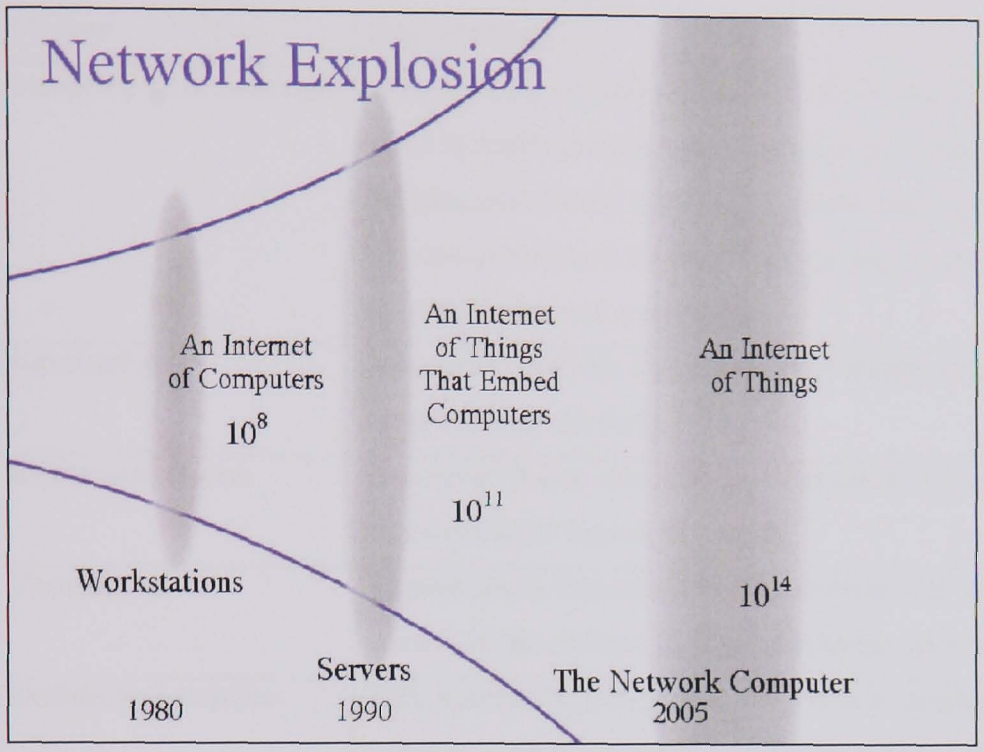
## 4.1 Introduction to the Case Study Company

Sun was founded by four people in February 1982 in the United States with its head office in Santa Clara, California. The founders had different views on computing technologies and since 1986 the company has embraced a singular vision: "*The network is the computer* [tm]" – this vision has propelled Sun Microsystems, Inc. to its position as a leading provider for industrial-strength hardware, software and services that make the Net work (Nasdaq: SUNW). In 2004, Sun was operating in more than 100 countries and on the World Wide Web at http://www.sun.com. Furthermore, the information technology (IT) company is today known as a leader in IT innovations with a global workforce of over 31,000 employees world-wide. Two of the three production locations are in the US; the third is in Europe. Sun conducts its research and development activities in six different countries. The company claims to be among the top five on the cutting edge of information technology. The chip technologies and software (e.g. Java) track record of the firm provides a twenty-year history of "First" Innovation. These achievements and success stories of the company have always been strongly related to its vision.

### 4.1.1 Sun's Vision

The central interest of the company in developing new products and services is information technologies networks. Sun believes that the network will soon consist of billions of devices interacting with millions of services over the network, doing so predictably, securely and globally. Sun's vision of network computing starts with the challenge of digital network growth: *Billions of Devices Interacting with Millions of Services, Predictably, Securely, Globally*. Figure 5 illustrates Sun's vision of network explosion.

Figure 5: Sun's vision of network computing (Papadopoulos and Yen, 2004).




Thus Sun views the network as huge and highly diversified, and this has induced Sun to undertake high R & D investments in network computing in comparison to other innovative high-tech competitors (refer to Appendix 4).

Based on the vision of the connecting network, in 1986 Sun's founder team coined the phrase "The Network Is the Computer". Customers initially did not understand the slogan, but the executive management team insisted that it was the right conclusion. Since 1986 the management team has related to that vision, and it has shaped Sun's values and beliefs.

#### 4.1.1.1 Company Values and Beliefs

Sun's values describe both what it is as a company and what it aspires to be. The management team believes that those values have shaped the company since the beginning, and that they still express today what the company needs to emphasize to succeed in the long term (Source: internal company material). These values should guide the decision-making of every employee. In this regard, Sun's values are divided into five different key themes.

Table 13: Sun's Value and Beliefs (Source: internal company material)

| *Values* | *Description* |
|---|---|
| **Integrity and courage** | Integrity and courage should demonstrate the determination to do what is right, champion good ideas and make tough decisions. Employees should be open, honest, learn from their mistakes and be straightforward in all of their dealings with customers, partners, shareholders and each other. |
| **Innovation** | Innovation reflects the company's determination always to challenge conventional thinking. |
| **Customer focus** | Customer focus ensures that the company will understand and meet its customers' business needs. |
| **Teamwork** | Teamwork is important for the company to value the diverse perspectives of their global workforce, partners and customers. |
| **Delivering results** | This manifests Sun's belief that it is in business to create value. The company wants to achieve long-term results through disciplined planning and execution. |

The values and beliefs illustrate that Sun was built and influenced by engineers and scientists from Silicon Valley. Those engineers believed to develop innovative products for other companies and institutions. Innovation, especially, is strongly claimed by the company to be one of its core capabilities, as reflected in its mission to make the vision reality.

#### 4.1.1.2 Sun's Mission

With its drive to build the service driven network Sun has focused its efforts on a singular mission:

> *'To solve complex network computing problems for governments, enterprises and service providers.'*
> (Scott McNeally, 2004)

In this context the company addresses complexity through specific product design. The first element is virtualisation and automation. Sun seeks to deliver its products with features which can be used by its customers to plug and hide their existing

computing environments (e.g. data centres) under a virtualisation layer. Virtualisation can be described as an additional software or technology layer provided by Sun to hide the heterogeneity of different customer technology systems and platforms. Different hardware and software resources are virtualised and their complexity reduced. Companies will be able to focus on computing services, rather than on different hardware standards, updates and releases. Other elements in the company's mission are Sun's open standard policies and platform-independent Java technologies. All company products are integrated and able to work together. Through open standards and platform interfaces with other, even competing, company products, Sun's products can be integrated to provide customer solutions. In this context, Sun has established a holistic approach (Sun Microsystems, 2004b) to network computing in which new systems, software and services (integrated and pre-tested) are all released on a regular, quarterly basis. The purpose behind this approach is to reduce the computing complexities for customers and to increase the compatibilities among different computing products (including Sun competitor products). The company's market success suggests that the company adopted the right vision and pursued the right mission.

### 4.1.2 The Company's Market Presence

In 2005, Sun was a global company with more than half of its FY2004 $11.36 billion revenue (McGowan, 2004) deriving from international sales. Sun had a sales presence in 100 countries with a global workforce of 31,000 employees worldwide. Sun had set up a worldwide network of iForce Centers around the globe; these were partner facilities that helped clients to design, develop, test and implement industry business solutions. They exemplify Sun's close relationships with its partners. The company knows business systems and is committed to delivering the highest possible return on its client's information assets, serving as a trusted partner to the Global Fortune 1000. Sun powered over half of the 25 largest Fortune 100 companies and ran the IT infrastructure for most companies doing business with and on the Internet. However, in fiscal year 2004 the company was forced to save over 250 million USD while operating in the still challenging information technology industry. Those challenges arose after 2000 because of the global IT market downturn.

### 4.1.3 Dynamic Market Transformations and the Challenges for Sun

After 2000, Sun's global business environment changed dramatically. The global IT boom was definitively over, and customer behaviour and market conditions started to change and transform the business landscape. The pressure on Sun increased in two dimensions. Firstly, Sun was forced to improve its overall efficiencies and to reduce costs. Secondly, Sun was forced to develop new areas of growth. The following statement reflects the market pressure and changes that Sun was facing.

> *'Maybe five / six years ago the case was completely different. This was actually a seller's market in the sense that customers just embraced the value of the solutions that were available in the market place. There was a hype caused by the Internet and everyone appeared to see that there was a huge paradigm shift going on in the market. Now we all know that the so called Internet Bubble burst plus minus in April of 2000 – all of a sudden the majority of customers, especially large customers – just put on the brakes stopping all sorts of internet based projects. There was a sense that previous investments made in IT were not generating the promised returns. A focus on tactical cost cutting was introduced. The IT industry as a whole felt the implications of customers holding back, seeing reductions in revenue streams and profits leading to wide scale lay-offs – something never seen before.'* (Senior Sales Manager & Customer Representative, 2004, [1])

The statement reflects that the market strengths and revenue drivers that the company had enjoyed in the past were not continuing to create impact on revenues and growth in the present and might not be valuable in the future.

> *'The market conditions definitely changed and Sun was not geared or used to a sudden drop in a shrinking market.'* (Senior Sales Manager & Customer Representative, 2004, [1])

The company's resources as the large customer base, global partner-network and product-based sales capabilities did not help to secure Sun's stake in the shrinking markets. Customers' needs changed, and they required Sun to provide real business solutions to solve their business problems, instead of fancy and cool technologies. New capabilities became more and more important for the entire company and heightened demand for new business directions and strategies.

## 4.2 Sun's Strategic Agenda and New Business Strategies

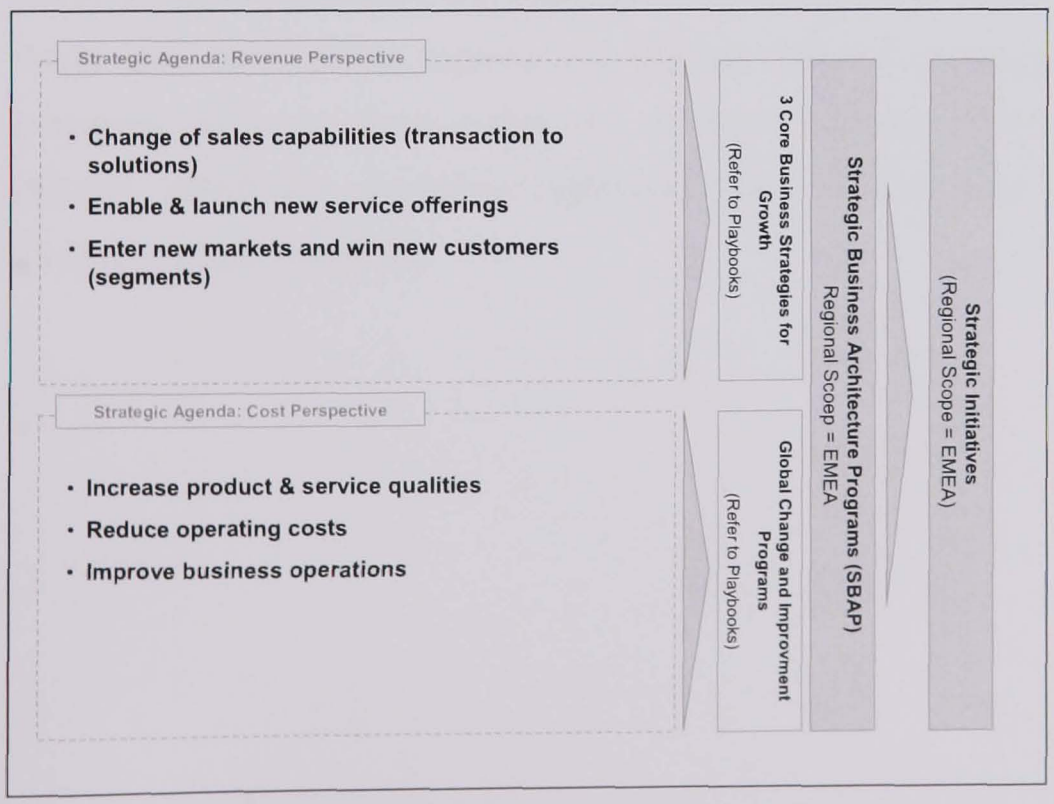
To respond to the changing environment and to achieve its growth goals, in 2004 Sun identified three strategic directions at the core of the value which it offered to its customers, partners and the industry (Sun Microsystems, 2004a). The first strategy was to *"attack cost and complexity"* of their customers. Internal company studies found that a system administrator could manage between 15 and 30 systems. However, to fulfil all relevant business requirements companies would need to manage over 500 systems. Furthermore, system utilization was around 15 percent but should be 80 percent. For example, a company needed weeks to deploy a new network service; it should instead take days or even hours. This strategy was focused on simplifying systems which cut costs for customers and helped them be more productive (Example: Sun N1 software product roadmap).

The second strategy was *"accelerating network service deployment"*. This strategy recognised that time was money for Sun's customers, particularly time to market new products and services. Sun's customers needed to be able to quickly build and manage Web services delivering information reliably at minimal risk (Example: Sun Java and XML technologies and service delivery platform).

The third strategy was to help Sun's customers "*deliver data seamlessly and robust security*" wherever their customers happened to be, whenever they needed their data, on whatever kind of devices they were using. Sun's products should allow their customers to drive network computing to every device. This direction was based on the firm's vision that "everything and everybody would be connected to the network". Mobility meant more than being wireless. It was more than desktop computing for Sun. It was about providing secure information to consumers, inventory managers, executives, teachers, financial advisors, and emergency medical technicians - practically anyone, no matter where they were. It was about making valuable information as mobile as the person who used it.

Nevertheless, Sun's customers began increasingly to judge the different service IT vendor offerings on the basis of on their proposed business values. In this context, Sun was not fully able to deal with the shift in customer demand: the company had not developed the necessary solution sales capabilities in the past. Furthermore, the growing market pressures and price reductions challenged companies like Sun to be more efficient in their operations and to lower their cost base.

Figure 6: Sun's Strategic Agenda (Sun Strategic Playbook 04/05).



The company's top management teams identified various operational inefficiencies, cost pressures, and strategic capability gaps within the global sales force, such as Sun's partner business operations, the need for new solution offerings, and strategic customer relationship management issues. The company's top management team identified some of those challenges at the very beginning and some of the challenges at a later stage. Nevertheless, the company launched more and more strategic initiatives to address these issues and gaps by renewing the firm's capabilities and establishing competitive advantage. Figure 6 summarises Sun's strategic agenda of 2004.

In this regard, the management team decided to improve two main areas of the company. Firstly, the revenue perspective reflected the improvements in Sun's existing service offerings and customer engagement approaches. To implement Sun's new business strategies, the company sought to provide complete customer solutions instead of single product offerings. Furthermore, the new offerings would provide Sun with entry to new markets and revenue streams. Secondly, the cost perspective implied that Sun would be more efficient in the future as overall industry margins would decrease and the company would compete more and more with decreasing prices for new IT products and solutions. Both perspectives were essential for Sun's future and started to be implemented through different strategic initiatives. These initiatives were organised within the strategic business architecture programme (SBAP). SBAP was created to implement Sun's new business strategies through various strategic initiatives.

## 4.3 Strategic Initiatives

Sun's strategic initiatives became the main means to implement the new business strategies and to transform Sun's existing environment into efficient and effective business operations. The company launched a large number of global key programs (Source: internal company documentation), managed by different programme managers and change teams from the SBAP department, as listed in Figure 7.

Figure 7: Strategic Initiative in relation to Sun's Strategic Objectives.

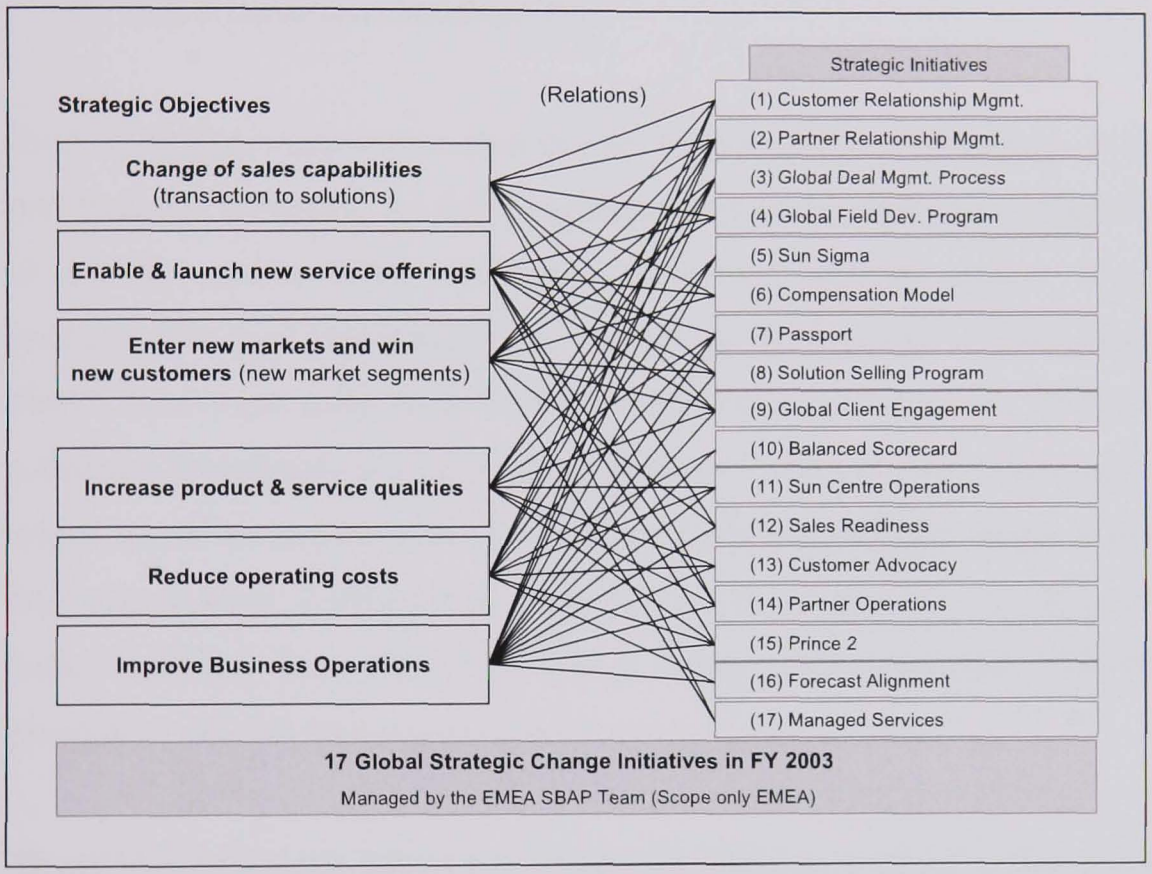



Figure 7 illustrates the portfolio of 17 key programs with strategic profiles launched within the EMEA (Europe, Middle-East and South Africa) time zone to implement Sun's strategic agenda and new business directions. Nevertheless, the company was running far more projects at different operational levels. In this context, the new SBAP team did not seek to cover all company projects; furthermore SBAP was only responsible for executing Sun's strategic initiatives.

### 4.3.1 Organisational Environment of Sun's Strategic Initiatives

The SBAP group was organisationally embedded within the global sales organisation (GSO) and influenced by different GSO executives, because in the mid-1990s Sun was still divided into three main organisational units (Source: internal company documentation):

- Sun Support Organisation (SSO)
- Global Sales Organisation (GSO)
- Sun Professional Services (PS)

Each individual organisation had its own reporting line, management structure, goals and budgets. However, the GSO organisation was the strongest organisation in terms of decision power, responsibilities, budgets and business impact. Moreover GSO primarily financed and managed the SBAP group; therefore all initiatives within the SBAP team were more under the GSO influence than were the PS and SSO. This influence opportunity was utilized by different GSO executives to support initiatives which would be in line with GSO interests and expectations within a de-centralized Sun organisation. Furthermore, there was no doubt that the executive management team, including Scott McNeally, had a strong GSO orientation and supported the promotion of GSO managers to SBAP management positions.

The SBAP group was led by a headquarters' director with more than twelve years of experience at Sun. He had previously worked for HP and other IT companies in similar positions. SBAP was related to the executive management teams as a corporate centre with no operational business responsibilities. Nevertheless, between 2000 and 2004, SBAP was represented by a group of between 12 and 16 people. Most of them had worked before in different GSO positions and were experienced programme managers with specific knowledge and skills in the areas of Customer Relationship Management, Six Sigma, Balanced Scorecard, Process Re-Engineering, Organisational Analysis, Change and Programme Management. In 2002, the team consisted of 12 people. Seven of them, including the team leader were located in the UK, two in Germany, one in Switzerland and one in France. Updates on the different

programmes were given at a weekly team meeting through telephone conferencing and individual personal calls. Every second month the team met at a different EMEA Sun office (France, the UK, Germany, etc.) for a one-day update and review meeting on progress of the ongoing initiatives.

### 4.3.2 Structure and Approach of Sun's Strategic Initiatives

The SBAP team sought to standardize all strategic initiatives as much as possible and used Prince 2 (international standardised project and programme management methodology and framework) as the standard programme management methodology. At the same time, one of the company's decisions was to roll out Prince 2 alongside ongoing initiatives across the company. The idea was mainly GSO-driven, the purpose being to make Sun more project work oriented with the expectation of managing internal and external (client) key projects more professionally, in time, and on budget, and to minimize delivery risks, as outlined by the following statement.

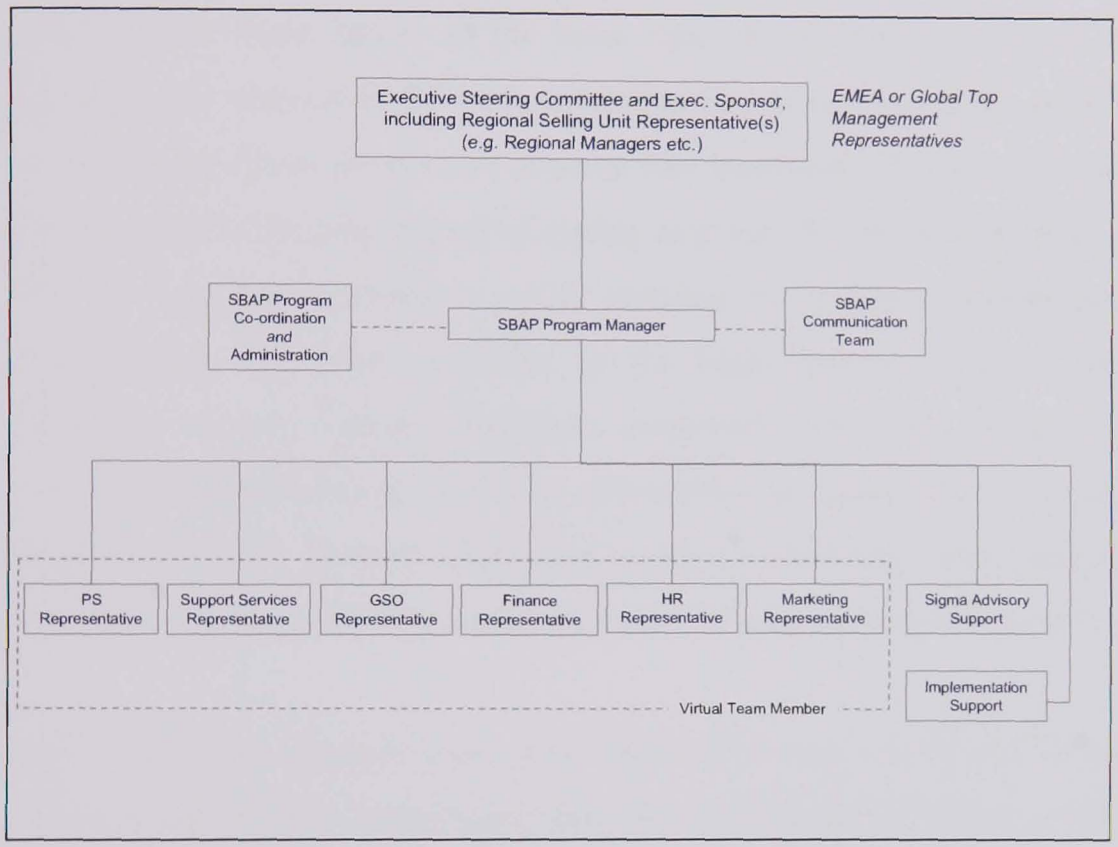
> *'In the past our customers recognized Sun as a place where they could get skilled people with specific knowledge and capabilities like a Java Expert. In the future our customers should think about Sun that they can deliver risky projects to solve our [customer] complex business problems.'* (Senior Manager UK 2003 & Sun Sigma Project Manager, [16])

In this context, the roll-out for Prince 2 became another of Sun's strategic initiatives. Furthermore, this example illustrates how GSO executives influenced the portfolio of Sun's strategic initiatives by adding the Prince 2 roll-out to the existing portfolio of key programmes.

Every strategic initiative was managed through the organisation illustrated in Figure 7. All programmes were led by an internal SBAP programme manager with a dedicated project support office and a virtual team. The virtual teams comprised representatives from the different lines of business like country managers, finance

managers, marketing representatives, HR representatives, depending on individual programme requirements and roles. Virtual team members covered two key aspects for all strategic initiatives. Firstly, they were necessary to include relevant aspects on the business side and to facilitate early pilot implementations. Secondly they were the key to initiating and driving changes. Moreover, each programme had its own intranet homepage and communication team to keep the different stakeholders on track, based on the individual programme deliverables.

Figure 8: Strategic Initiative Organisation (Source: Internal SBAP Documentation).




All strategic initiatives were rolled out in two steps. In step 1, the initiative was launched within the EMEA time zone. After the EMEA time zone roll-outs had been completed, the initiative was extended globally (step 2). The SBAP team's expectation in step 1 was to minimize risks and apply the lessons learnt, apply the new deliverables (as new processes, concepts, applications etc), and create know-how for use in the second step, where the aim was to improve the initiative's overall quality and results. In this context, all strategic initiatives were structured as global programmes, strongly supported by Sun's top management.

# 5 The Sun Sigma Initiative Case Study

## 5.1 Introduction

In the late 1990s, improving the quality and process efficiencies of Sun's products and services became one of the strategic focal points of the existing management team. The company decided to launch a global process excellence and improvement programme – the Sun Sigma initiative. Customers expected constantly improved quality for a better price. At the same time, the IT industry started to intensify its quality path, stimulating IT-companies like Sun to enhance their qualities in response to challenges from unexpected sources like Bangalore. Indian software and services firms started to provide a level of quality at prices that made it difficult for companies like Sun and their partners to justify carrying out software development, application management, and other activities in the higher-priced United States or Western European regions. Indian companies competed with many Western companies on pricing and established a new value proposition on quality that was equal to or better than that of their Western counterparts. Those challenges and trends highlight how crucially important the Sun Sigma initiative became for Sun Microsystems, Inc.

The Sun Sigma initiative arose from General Electric's (GE) well-known Six Sigma quality improvement programme. Jack Welch (Former GE CEO), a very good friend of Scott McNeally, was one of the key drivers of GE's Six Sigma development and experience. Through Scott McNeally's close relationship with Jack Welch (both had an interest in golf), GE's Sigma became an increasingly feasible solution for Sun's executive board to solve the firm's quality and performance issues.

The Six Sigma programme had been implemented to improve quality at major corporations worldwide, including GE, Allied Signal/Honeywell, Toshiba, and many others. Sun's executives realised that Six Sigma was a way to measure processes (for example, statistically, Six Sigma processes, products, and services met defined customer requirements 99.9997 percent of the time; a near-perfect result); and a way to change the culture of an organization marked by six important themes, adaptations

of which were embraced by Sun Sigma. Finally, the Sun Sigma initiative was defined as a broad and comprehensive concept for building and sustaining business performance, success, and leadership across the company.

The following in-depth case study discusses how the Sun Sigma initiative differently interacted with Sun's environment, and especially its organisational context and other strategic change initiatives. The case study is divided into three major sections. The first section illustrates the rationale for the Sun Sigma initiative, including the definition and vision of the Sun Sigma initiative and the main objectives specified by Sun's management team. The second section discusses the implementation of the Sun Sigma initiative and which kinds of challenges and effects emerged during the implementation from interactions between the Sun Sigma initiative and Sun's organizational context and from interactions between the Sun Sigma initiative and ongoing strategic initiatives. The last section illustrates the overall findings of the Sun Sigma initiative case study.

## 5.2 Rationale of the Sun Sigma Initiative

In 2000, Sun Sigma became a programme spanning the entire organisation in order to improve the company's process efficiency and cost performance. Officially, the Sun Sigma initiative was a response to challenging market conditions intended to make the firm more competitive. Sun's overall operating costs were too high in comparison to those of its competitors, and the company was obliged to lower its operating costs and increase product qualities at the same time. Moreover, quality issues grew increasingly pressing and constituted a real threat for the company. Customers started to compare Sun's high price products with their competitors and to change vendors, especially during the market downturn after 2000. This threat stimulated the management team to launch a strategic improvement initiative – Sun Sigma.

> *'At the Spring Leadership Conference 2000 Sun committed to implementing 'Six Sigma'. It is the core methodology Sun is using to achieve industry-leading availability and quality, by driving key processes with*

> *data about critical customer requirements. "Sigma" is the term used in statistical analysis for variation from perfection. By using data to define and control process, then measuring defects across a project (or across Sun), a common measurement of quality for any type of process can be attained.'* (Source: internal company documentation)

Initially, the management discussed the establishment of a Six Sigma platform for various quality improvements and projects. The aim of these key projects was to improve Sun's product qualities, business efficiencies, and to reduce customer complaints by enhancing the fulfilment of critical customer requirements.

> *'We [Sun] received more and more customer complaints. Hence, we had to decide how the quality of our products and services could be increased. At the same time Jack Welsh, a very good friend of Scott McNeally, told him how Sigma became the household at GE.'* (Senior Project Member & Strategic Sun Sigma Projects, 2004, [2])

Finally, Sun decided to buy the rights from GE in order to use and adapt GE's Sigma as a platform for future efficiency standards at Sun Microsystems, Inc. In this context, the intention of the first Sun Sigma activities was to achieve success stories and thus build confidence, so that company resources would continue to be invested in new Sun Sigma projects.

> *'We started the first Sun Sigma improvement projects ... we were impatient to create the first Sun Sigma success stories. In the beginning we required success stories to build confidence and prove to our stakeholders that we are moving into the right direction ... '* (EMEA Sales Operations & Sun Sigma Projects, 2006, [46])

In this context, the executive board decided to group and manage all ongoing and planned Sun Sigma activities into one strategic initiative which would follow and establish Sun's vision of Sun Sigma.

### 5.2.1 Definition and Vision of the Initiative

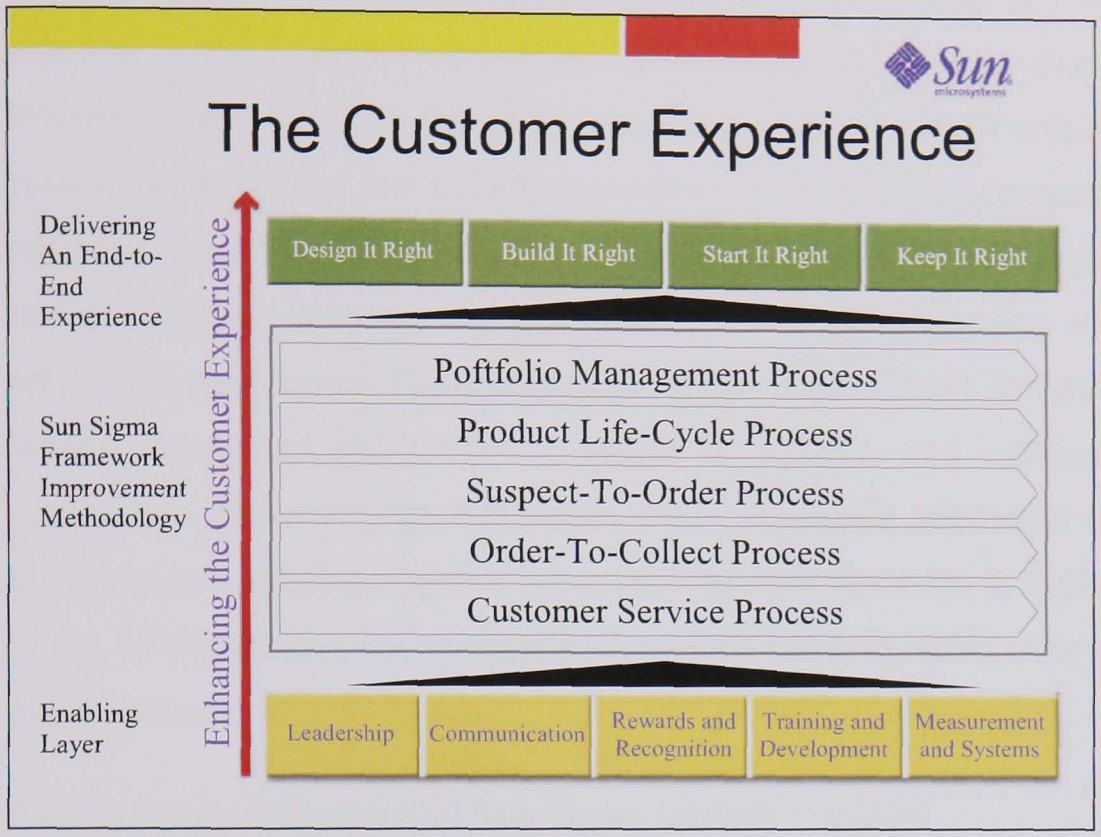
The Sun Sigma initiative was launched by Sun's management team as a broad and comprehensive concept for building and sustaining business performance, success, and leadership. The programme was designed to integrate the Sun Sigma vision into Sun's back-office operations, according to GE's Six Sigma. In many organisations, Six Sigma simply means a measure of quality that strives for near perfection. As expressed by GE, the central idea behind Six Sigma was that, if companies can measure the number of 'defects' in a specific process, they can systematically figure out how to eliminate them and get as close to zero defects as possible (Sigma is a letter of the Greek alphabet and is used in statistics as a measure of variation). Sun defined Sun Sigma as an all-out assault on defects occurring in processes that produced products, services, or transactions. The initiative represented Sun's core methodology to achieve industry-leading availability and quality. A new Sun Customer Advocacy Organisation (CAO) was to be established by the initiative to play a key role in the future, driving Sun Sigma practices across the company to achieve high customer satisfaction. Nevertheless, the initiative was influenced from the outset by the firm's increasing customer orientation driven by the CRM Convergence initiative (CRM = Customer Relationship Management). At an early stage, the Sun Sigma initiative drifted from implementing its visionary Sun Sigma framework to driving additional customer centred activities. Expectations about the

Sun Sigma initiative shifted to troubleshooting and solving customer problems areas like reducing customer complaints and increasing overall customer satisfaction rates. Furthermore, some executives expected Sun Sigma to be induced by customer feedback to increase overall service and product quality and to develop capabilities that made Sun more proactive to its customers.

> *'The project should develop the capabilities to be more proactive to our customers. For example, if problems occur and we have no solution, we would need a structured process to deal with this specific issue because we try to keep customers and avoid bad press. The information could be easily used by our competitors to attack our brand and image. On the other side, we had to deal with those kind of issues and establish a learning processes by providing solutions to similar problems to other customers and not to create the same problems again and again.'* (Senior Project Manager & Strategic Sun Sigma Projects, 2004, [2])

Those expectations increased the scope of the Sun Sigma initiative and manifested the management's expectation that the Sun Sigma initiative would solve a wide range of Sun's strategic problem areas and become a strategic enabler for the entire company. This overall expectation was derived from two different key opinions within the organisation. Firstly, Sun Sigma would provide effective tools with which to combat declining service and product quality, an increasing cost base, and growing brand and image damage. Secondly, Sun Sigma would help establish a learning process to increase Sun's operational efficiency and create a future platform for knowledge sharing. The organization should not produce and solve the same problems again and again. In this context, Sun's executives defined the Sun Sigma vision for the entire company.

Figure 9: Sun Sigma – A Visionary and Company-wide Framework.




The vision reflected and communicated the first step in Sun's strategic Sun Sigma transformations, which should be realised through the Sun Sigma initiative. Inspired by the CRM Convergence initiative, Sun changed Six Sigma into Sun Sigma and developed the vision of establishing a 'Customer-First Company'. Figure 9 illustrates the core elements of the Sun Sigma vision. A vision which intents to establish greater customer orientation of the company and at the same time drive cost-efficient operations, Sun Sigma was positioned to improve the firm's core processes and operations. Overall, the Sun Sigma Framework was defined to enhance the company's management system by bridging its enabling layers (refer to Figure 9: Leadership, Communication, Rewards & Recognition, Training & Development, Performance Measurement & Systems) with continuous improvements of the Sun's core business processes as the portfolio management process which represented the management of the company's product and market offerings, closely interconnected with the product life-cycle process. That process should be improved through Sun Sigma to manage quality issues and product risks more proactively for their customers. Furthermore, the suspect-to-order process reflected the entire sales and engagement process of Sun, which should be enhanced by Sun Sigma concepts to increase the firm's overall

success rates and stimulate growth. The order-to-collect process covered Sun's billing and product/project delivery process supported by the fifth key process of the company – the customer service process. Customer service processes targeted to leverage Sun's internal customer knowledge, create robust solutions for their customers and protect Sun's existing customer base from their competitors. All those processes should be enhanced and continuously improved by Sun Sigma to establish fast and valuable solutions for their customers from the beginning without creating critical response times. Those occasions created major threats for Sun as customers became unsatisfied and started to switch to products and solutions from Sun's competition. Moreover, the Sun Sigma vision demanded substantial changes within the company's existing business operations and core processes to reshape Sun for the future. In this context, the management team defined four different key objectives for the initiative.

### 5.2.2 Strategic Objectives of Sun Sigma Initiative in 2001

Finally, four different delivery elements formed the core of the Sun Sigma initiative objectives to implement and roll-out Sun's vision of Sun Sigma across the firm. Firstly, an initiative was launched to establish a company-wide CAO which would be linked to all organisational units. CAO's (Sun Sigma within the organisation) highest goal should be to defend customers' quality rights and expectations. Moreover, CAO would furnish future Sun Sigma experts and attach them to various departments, where they would initiate projects to solve individual problems and challenges across the firm. In this context, CAO should perform a key role in the future to drive Sun Sigma practices across the company. Secondly, Sun Sigma was intended to launch a company-wide education and certification programme. This programme should have increased Sun Sigma knowledge and shared it across the organisation. The following certification concept was adopted to roll-out and establish a standardised training and certification programme across the company, sorted by experience and professional degree. Starting with a basic Green Belt certification level up to the highest possible certification degree of a Sun Sigma Master Black Belt (MBB):

- *Green Belt:* Green belts would lead smaller Sun Sigma projects, devoting between 20%-50% of their daily work to Sun Sigma Projects.
- *Black Belt:* Black belts would manage larger Sun Sigma projects with the strong involvement of statistical tools and methods. Often, these people were 100% involved in Sun Sigma projects.
- *Master Black Belt*: master black belts would manage project portfolios, coach employees and deliver training.
- *Sun Sigma Champion*: Organisational leader of the MBBs and MBs. Marissa Peterson took over this role at Sun.

Sun created four different roles of Sun Sigma experts. The titles were selected from martial arts disciplines like Karate or Judo in order to reflect and underpin the professionalism and precision of the training and certification programme. Thirdly, the initiative began to develop an enterprise-wide portal providing news, tools, training, registration, and information for all relevant Sun Sigma areas. The Sun Sigma portal should provide a central interface to all Sun employees worldwide where people could download tools, apply for training and certification programmes, and learn more about the latest Sun Sigma activities within the company. Moreover, employees should be able to exchange experience and/or find answers in one of the online discussion forums. Sun believed that the use of information technologies would help people to be more efficient in their daily work. In this context, the Sun Sigma portal should become a part of Sun's comprehensive intranet network. The firm believed in the advantages of new concepts, such as e-Learning or virtual team meetings, which should enhance current collaboration among the firm's employees. Fourthly, Sun Sigma was put in charge of conceptualising and driving Sun's process excellence standards. In this regard, the Sun Sigma initiative should strengthen existing projects with Sun Sigma knowledge and establish company-wide process excellence projects to improve Sun's core business processes and goals (see Appendix 10). Those process excellence projects could emerge from aligning existing projects with the goal of improving Sun's business operations or launch new Sun Sigma projects. Sun Sigma projects should follow the Sun Sigma project methodologies; provide a clear business case on ROSS (Return on Investment, especially Return on

Sun Sigma investments) and decisions should be data- and fact-driven. Table 14 summarises the four key objectives of the Sun Sigma initiative in 2001.

Table 14: Overview of the key objectives of the Sun Sigma initiative

| Key Objective | Description |
|---|---|
| • Establish a new Customer Advocacy Organisation – CAO | • Protect the quality rights of Sun customers<br>• Develop Sun Sigma knowledge within the organisation<br>• Develop organisational routines for Sun Sigma expertise<br>• Provide support to all Sun Sigma projects/activities |
| • Establish a global education and certification programme | • Develop Sun Sigma expertise across the company<br>• Enhance the current knowledge with Sun Sigma across the company – new career opportunities |
| • Establish a Sun Sigma Portal | • Enhance the work of Sun employees with e-Support<br>• Increase business collaborations across departments |
| • Establish Process Excellence Standards | • Apply Sun Sigma knowledge to existing projects<br>• Align existing key projects<br>• Launch new process improvement projects |

These four key objectives reflect the strategic goals of the Sun Sigma initiative in 2001. The team and the company enthusiastically set about solving Sun's complex business problems and making the company more efficient.

## 5.3 Implementation of the Sun Sigma Initiative

The Sun Sigma initiative was launched and strongly supported by Sun's global executive board. The initiative rapidly became a global initiative and received worldwide attention within the Sun organisation. In this context, Sun's executive board initiated two key activities. Firstly, the management team appointed a global executive board member as the 'First Customer Advocate' to create and develop a global CAO, embedded within the existing Sun organisation.

> *'...Marissa Patterson ... started the Sigma thing as first Customer Advocate. She supported it in a massive way. She worked really hard and did flaming speeches via email and webcasts and so on. She developed a new organization with programme managers...'* (Senior Program Member & Sun Sigma Black Belt, 2005, [21])

Secondly, the management team launched the Sun Sigma initiative, and the 'First Customer Advocate' appointed a Master Black Belt (MBB) as the responsible programme manager for it. In the beginning, CAO was strongly supported by the Sun Sigma initiative managed by the responsible MBB, in various ways. For example, the initiative team member developed training and certification programmes for CAO which would be fully managed by CAO at a later stage. Furthermore, teams of the initiative defined and recruited a new portal solution development team which started to create the global Sun Sigma portal. At the beginning, the Sun Sigma initiative teams managed the conceptualisation and development of the portal, which would also be fully managed by CAO at a later stage. Those activities would promote acceptance of Sun Sigma within the wider organisation by providing Sun Sigma expertise to ongoing projects.

Driving process excellence standards by enhancing current projects with Sun Sigma expertise and launching new Sun Sigma projects became one of the focal points of the Sun Sigma initiative. Moreover, the Sun Sigma programme manager took over the

task from management of rolling out the first Sun Sigma 'waves' within the EMEA (Europe, Middle-East and South Africa) region, which initially comprised 13 projects. The first 'wave' of Sun Sigma projects focused on various quality problems, as described by one of the first key project leaders.

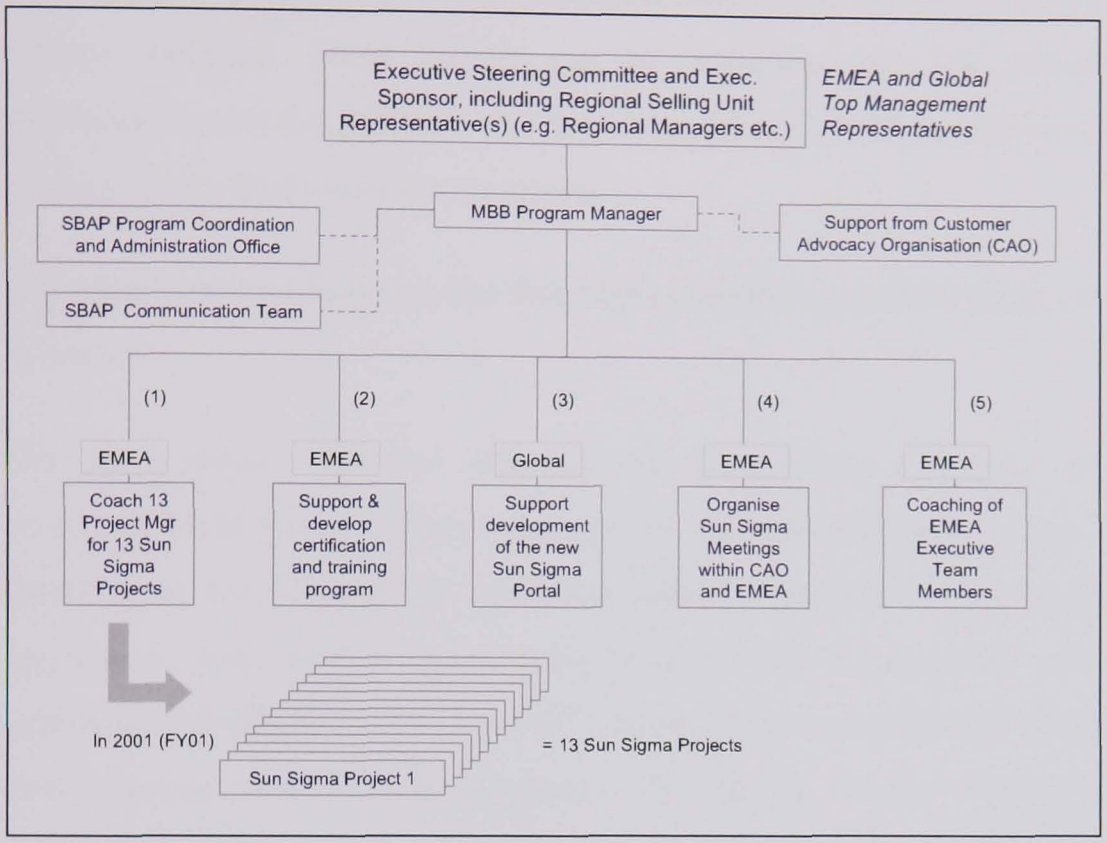
> *'The scope of my project was to design or improve a process, to alert customers of known problems for which we did not have fixes but workarounds. The project should create impact on customer satisfaction and the way that the company approaches and deals with critical customer situations.'* (Senior Project Manager & Strategic Sun Sigma Projects, 2004, [2])

One of the first Sun Sigma projects sought to impact overall customer satisfaction and product quality and aimed to solve service delivery problems. All those first 13 projects were coordinated by a Sun Sigma expert, or their champions were coached by Sun Sigma experts to enhance and build up the desired Sun Sigma knowledge as rapidly as possible. Furthermore, to influence and strengthen current project activities within the Sun organisation with Sun Sigma expertise, the initiative launched various meetings and steering boards within the organisation. The aim of these meetings was to get all decision makers closer to Sun Sigma, to coach individual executives, to prepare decisions on changing existing projects, and to launch new Sun Sigma projects.

Alongside those project activities, Sun Sigma became increasingly organisationally embedded through CAO. This was not only because every selling unit, region, and department was asked to allocate a specific amount of their resources and budgets to the Sun Sigma initiative and CAO, but also because every major activity and project in the various regions became increasingly challenged to involve Sun Sigma experts and to adopt Sun Sigma methodologies and frameworks. Moreover, CAO started to grow alongside the Sun Sigma initiative through the recruitment of more and more people from the wider Sun organization and external sources. Figure 10 illustrates the

overall Sun Sigma initiative implementation structure and the organization of six key sub-project implementation activities.

Figure 10: Implementation of the Sun Sigma initiative (EMEA scope)




The Figure illustrates how Sun rolled out and implemented the Sun Sigma initiative alongside the development and integration of CAO into the existing Sun Organisation. As already mentioned, the first focal point (1) was to roll out a series of 13 Sun Sigma projects to improve existing customer support processes and enhance overall product and service qualities. The second team focused their energy and activities (2) on preparing and launching global Sun Sigma training and certification programs to build up Sun Sigma knowledge within Sun. These activities were supported by the new Sun Sigma portal development team. The portal team (3) sought to enhance the diffusion of Sun Sigma knowledge by developing a central intranet Sun Sigma portal. The fourth focal point (4) was to get the Sun decision makers closer to Sun Sigma and inspire Sun's existing leadership with the advantages of a Sun Sigma driven leadership style. In this context, the Sun Sigma initiative team established a global Sun Sigma steering board for Sun managers and executives to meet regularly and discuss improvements and take decisions on existing and new project activities. Moreover, the Sun Sigma initiative defined training and coaching programme (5) for

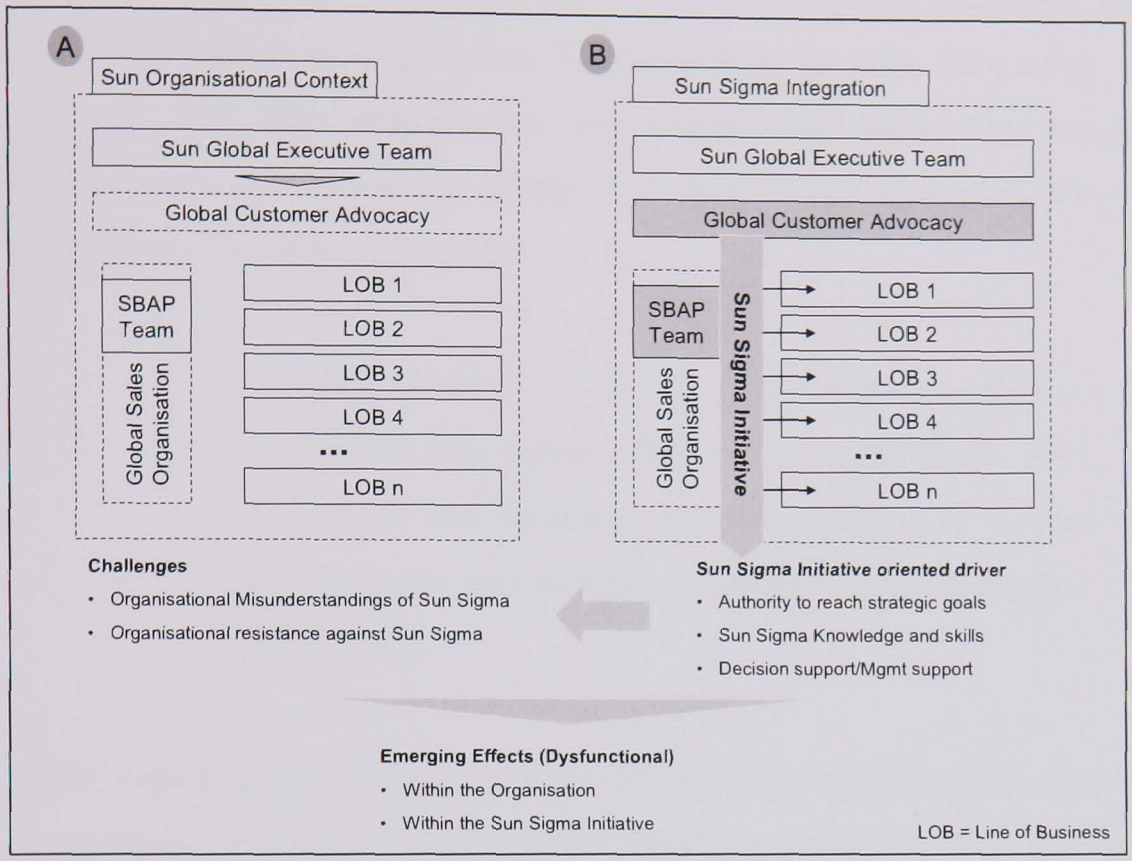
Sun executives and senior managers. Each Sun executive was assigned a personal Sun Sigma coach on the level of a MBB or black belt.

During the implementation and transformation of the Sun Sigma initiative, different effects emerged. These effects can be classified into (a) effects between the organisation and the initiative and (b) various types of effects between the Sun Sigma initiative and other strategic initiatives.

### 5.3.1 Interactions between the Sun Sigma initiative and the firm's Organisational Context

The Sun Sigma initiative affected the organisation and was affected by the organisation in its turn. These interactions emerged during a period where Sun was building up Sun Sigma. The initiative started to implement the planned Sun Sigma objectives, and various interactions between the organisation and the initiative stimulated challenges in the form of *organisational misunderstandings of Sun Sigma* and *organisational resistance against Sun Sigma*. In this regard, three initiative-oriented 'drivers' could be observed which facilitated initiative related challenges and triggered the various interactions between Sun's organisational context and the initiative. Firstly, the initiative's team member received strong management support and the authority to implement the Sun Sigma objectives. Secondly, through the close relation of the Sun Sigma team with CAO and Sun's executive board member as first 'Customer Advocate's', the Sun Sigma executive steering boards and the executive coaching panel, the initiative's team members gained a strong decision support from the management teams. Furthermore, the initiative team was increasingly able to influence the management teams in accordance with the Sun Sigma objectives. Thirdly, the initiative's experts provided new methodologies, templates, and skills which created respect and acceptance within the wider Sun organisation. These drivers facilitated various challenges and stimulated different effects, as illustrated by Figure 11.

Figure 11: Context of interactions between the initiative and the organisation.




The figure illustrates the organisational context (A) of the Sun Sigma initiative, including CAO. The initiative was managed by a Sun Sigma expert (MBB) appointed by CAO and employed by the SBAP team (Strategic Business Architecture Programme). As described in previous sections, the SBAP team was located within the GSO and had close relations with the sales organisation. In this new constellation (B), the initiative implemented the objective defined across Sun's various lines of business (LOB) which gave rise to different challenges and created different effects between the organisation and the initiative, especially within the areas of the firm's routines and processes, actual roles and responsibilities, existing skills and competencies, and organisational structures. The following sections describe those challenges and the related effects in detail.

#### 5.3.1.1 Organisational Misinterpretations of Sun Sigma

Various effects emerged from the organisational misinterpretations of Sun Sigma, such as the growing complexities and decreasing progress, especially with regard to solution-finding efforts. These misinterpretations induced Sun Sigma to adopt a cost

minimizing approach rather than pursue a new quality and process excellence standard. Moreover, based on the CRM Convergence initiative activities, Sun managers started to expect Sun Sigma to recover their decreasing revenues and margins. The sales organisation were faced with decreasing margins, growing competition, and increasing numbers of dissatisfied customers, who left Sun for competitors like IBM, HP or Dell.

> *'...GSO decided to be the first business unit to implement Sun Sigma. They didn't really know what Sun Sigma was all about and how to use it to recover our revenues and margins.'* (EMEA Sales Operations, 2006, [31])

GSO expected Sun Sigma to increase its sales opportunities and customer-win probabilities, to recover Sun's margins and revenues, and to make the sales operations more efficient. Influenced by GSO, Sun managers started to focus their attention on the "Return of Sun Sigma" (ROSS) instead of applying the Sun Sigma tools to their actual problems. ROSS was defined as a Sigma-specific return on investment calculation and reflected the potential financial benefit of every project in quantitative terms like cost savings.

The misinterpretation of Sun Sigma advantages caused a drift from the long-term Sun Sigma objectives to short-term cost reduction activities. The misinterpretations were supported by the firm's technocratic mind-set and its culture that a solution could be found for every problem and easily duplicated. ROSS became the solution for a wide range of different problems and inspired various departments to start adopting Sun Sigma tools, methods, and templates in their planning process. These activities shifted the focus of Sun and its managers away from the original objectives and the vision to implement new Sigma-driven processes, routines, roles and responsibilities.

> *'I think we did not sell it right. We [Sun] are predestined to use Sigma in the wrong way. We [Sun]*

> *are a technology company. We are technocrats. We came and sold the Sigma approach and tools instead of selling results. We said it is great, it is Sigma, and it has phases and has to have a financial return. The famous ROSS (operational benefit) and what the difference is and how it is going to be entered. And you need a Black Belt with an education. We talked about the method ... We described the method and tried to sell it instead of not talking about the method and selling the results.'* (Senior Program Member & Sun Sigma Black Belt, 2005, [21])

The Sun organisation came increasingly to believe that following the Sun Sigma guidelines was the solution, instead of using them as a vehicle to achieve better results.

> *'...and people then used Sigma ...they used it to be Sigma compliant, Instead of just using it for achieving their goals.'* (Head of SBAP/GDA, 2005, [15])

> *'...Because Sigma became synonymous with solving all problems...'* (Senior Project Member & Strategic Sun Sigma Projects, 2004, [2])

The growing euphoria about ROSS, on the one hand, and the misinterpretation of Sun Sigma by the Sun organisation on the other, induced the Sun Sigma initiative increasingly to identify ROSS potentials across the company and launch an increasing number of Sun Sigma projects, rather than enhancing the current company processes, tools, methods, and establishing the Sun Sigma framework. The managers were concerned about the decreasing revenues and increasing costs, and tried to find solutions to these challenges by identifying new ROSS potentials in their departments

and regions. Various effects ensued from these organisational misinterpretations of the initiative, and they had different implications in different groups.

Table 15: The effects and their implications.

| Initiative Activities | Effects | Implications |
|---|---|---|
| (1)<br>• Applying Sun Sigma concepts to Sun business operations | • Growing complexities decreased process efficiency | • Shifting firm focus from solving critical quality customer issues to company-internal Sun Sigma activities<br>• Absorption of scarce resources with additional Sun Sigma policies and procedures<br>⇒ *Focus shift and additional policies increased the challenge to priorities critical firm activities* |
| (2)<br>• Emphasise the value of Sun Sigma through the ROSS concept | • Growing expectations decreased planned progress of initiative activities | • Shift from long-term achievements to short-term returns on investment activities (ROSS)<br>• ROSS was recognised as a cost reduction approach and started to decrease long-term process excellence achievement efforts<br>⇒ *Conflicts between short term activities versus long-term investments/efforts* |
| (3)<br>• Adopting Sun Sigma concept from the wider Sun organisation | • Growing Sun Sigma orientation decreased solution-finding efforts and result orientation | • Reduction of unconventional solution-finding efforts, people started to follow standardised procedures and processes<br>• Shift from result-driven activities to Sigma template-oriented activities<br>⇒ *Decreasing utilization of problem-solving skills and result-driven working behaviours* |

### 5.3.1.2 Organisational Resistance against Sun Sigma

The Sun Sigma initiative facilitated changes within the company's existing organisational structure and created controversial reactions and resistance against the Sun Sigma initiative. In this context, CAO became more and more the organisational 'Advocate' for Sun's existing and future customers. However, the change in the existing organisational structures created new roles and responsibilities, and changes in various existing processes, as will be illustrated in detail by the following examples.

Firstly, the existing project teams became increasingly fearful of losing their competencies and jobs. The existing employees imagined that they would be replaced by certified Sun Sigma experts. Those people solved various problems for the company without using Sun Sigma methods and concepts.

> *'We did not really like Sun Sigma. Before Sun Sigma our people and engineers had the freedom to select their own tools and methods for problem solving. Sun Sigma provided the impression within our people that they were not good enough anymore. They were afraid to be replaced by certified Sun Sigma experts. The resistance against Sun Sigma increased. '* (Head of Service Delivery Organisation [Sun Sigma], 2005, [8])

On the other hand, the organisation and Sun's top management supported Sun Sigma strongly. New hired Sun Sigma experts received top management attention and support without proving their value to the company. This Sun Sigma euphoria and support caused jealousy within the existing teams.

The second example outlines how the new Sun Sigma concepts and methods reduced the performance of delivering results within the existing project teams, with the consequence of decreasing the management's attention. The managers started to expect an increasing number of improvements from Sun Sigma implementation. However, Sun Sigma implementation increased the complexities within the existing project teams. The teams became stretched to manage learn and adopt Sun Sigma alongside their daily project work. Furthermore, the same people were forced to deliver the expected results from their ongoing projects. The additional Sun Sigma project tasks and workload increased the resistance of various team members to attend Sun Sigma training and apply Sun Sigma to their daily work.

> *'I remember, I travelled about three times to California because we had three weekly sessions where experienced consultants taught us the methodology parallel to our project execution activities. But we spent a lot of time on describing the five phases [Sun Sigma Process Stages], which are define, measure, analyse,*

> *implement, improve and control, and basically because we were all learning at the same time we just got stuck in various places. That was the reason why management attention decreased over time. First, we became lost in the administrative and bureaucratic methodology approach and second we had no experience with the methodology. We developed Sun Sigma skills but the company's problems still existed - we couldn't sell and maintain the top management's euphoria at the beginning.'* (Senior Project Member & Strategic Sun Sigma Projects, 2004, [2])

The statement illustrates how the organisation tried to adopt changes in the existing processes by following and integrating the new Sun Sigma processes into the firm's everyday work. Those changes increased the resistance, as the overall project performance decreased and Sun Sigma related workloads increased.

> *'Our people developed their own ways of problem solving; this was always one of our strength in the past. People could be mobilised and motivated quickly, now the same people must follow standardised procedures of project proposals, approvals and pre-defined stages. This is controversial to our mentality and created a lot of trouble and resistance against Sigma.'* (Senior Project Member & Strategic Sun Sigma Projects, 2004, [2])

In this context, CAO missed the opportunity to enhance Sun's field work teams. CAO was initiated to enhance and support the ongoing project teams with Sun Sigma expertise. However, over time, CAO became increasingly the 'Sun Sigma organisation' within the 'Sun organisation'. Instead of increasing Sun Sigma knowledge within the different lines of business, CAO absorbed an increasing number

of people with various project work, teaching and coaching, and 'internal' Sun Sigma oriented meetings. The Sun Sigma initiative and CAO created a community of 'Sun Sigma' experts which debated new methods, frameworks, and trends instead of facilitating Sun's problem-solving processes. The effect on Sun's organisations and departments of the Sun Sigma initiative was an increase in the Sun Sigma project costs, and in business complexity. This leads to the third example of how organisational resistance emerged against Sun Sigma.

The third example describes how different managers and decision makers facilitated organisational resistance against Sun Sigma. Sun managers started to recognize various feedback from their teams and began to pay more attention to the values that Sun Sigma was creating for their departments and business units. A growing number of executives realised that, although more people were adopting Sun Sigma processes and methodologies, the results remained the same. Moreover, the costs spiralled, as every division and department was challenged to invest in CAO, with no clear returns on ROSS, only promises. Hence, the executives started to challenge ROSS and resistance against Sun Sigma continued to increase, impeding the Sun Sigma initiative from achieving its objectives.

> *'...you felt a passive resistance to or no interest in the theme... Behavioural optimism - that gets me personally angry because if you talk to them [Management] in a meeting everything will be fine at that time. If you ask for a Black Belt person to make the biggest effects in starting a Sigma project there will be nothing more than silence.'* (Senior Program Manager & Sun Sigma Black Belt, 2005, [21])

The management teams started to reduce their support for integrating Sun Sigma into the company's core business operations. The pressure on Sun's managers and decision makers to achieve their personal goals were still immense in those challenging times. In this context, Sun Sigma was not producing the expected results

and improvements. Furthermore, various decision makers and Sun employees involved in different Sun Sigma activities and improvement projects started to regard Sun Sigma as an obstacle to their everyday work and started to develop resistance against it and CAO.

> *'... I pushed Sun Sigma as much as possible, we started different improvement projects in my department and our people attended mandatory Sun Sigma training. We didn't get the expected results and I decided to reduce our Sun Sigma efforts ...'* (Senior Practice Manager & Sun Sigma Green Belt, 2004, [10])

> *'CAO couldn't deliver the expected Sun Sigma promises and I was forced to make a decision ... in our teams - we reduced the Sun Sigma engagements and went back to our daily businesses ... '* (Sales Manager Switzerland & Sun Sigma Green Belt, 2006, [27])

Sun managers were not committed to supporting CAO and investing their scarce resources in Sun Sigma training and projects, as the actual improvement results from the ongoing Sun Sigma projects were unconvincing. From the perspective of various Sun managers, CAO emerged increasingly as an administrative overhead, instead of providing effective support to various business units and departments.

> *'... through Sun Sigma we increased our overhead costs and methodology folders, but our customer challenges were still the same ... I don't see the value how Sun Sigma increased our customer operations and revenues. We should seriously increase our customer focus and investments ... '* (Senior Key Account Manager, 2005, [12])

Within customer oriented teams especially, Sun Sigma was losing credibility as an enabler to improve existing customer operations and increase the overall possibilities to reach the desired customer targets and sales goals.

Table 16: The effects and their implications

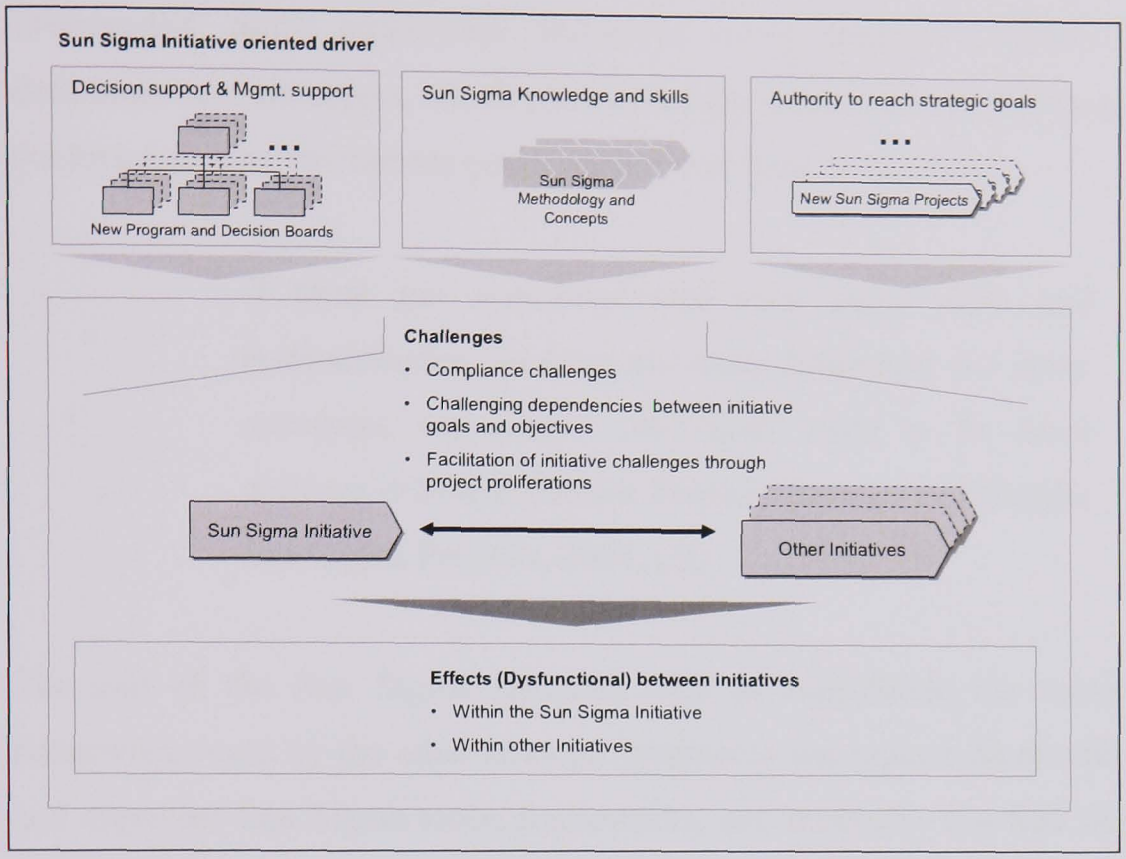
| Initiative Activities | Effects | Implications |
|---|---|---|
| (4)<br>• Replace existing project methodologies with Sun Sigma methods | • Increasing Sun Sigma project orientation reduced overall project acceptance | • Introduction of Sun Sigma concepts into actual projects increased overall project complexities<br>• Formalism of Sun Sigma projects increased with the consequences of additional delays<br>• The obligation to adopt Sun Sigma in their everyday project work increased resistance against Sun Sigma and slowed down overall project performance/progress<br>⇒ *People realised that Sun Sigma would not de facto solve actual business issues* |
| (5)<br>• Establish commitment of Sun managers to Sun Sigma and CAO investments | • Increasing managerial resistance against Sun Sigma reduced Sun Sigma's position as a valuable solution partner for Sun | • Managers from different departments increased their resistance against financing CAO – especially in the challenging market situation<br>• Managers started to challenge Sun Sigma activities and rejected improvement projects which required their attention and commitment<br>• Resistance by various managers against Sun Sigma increased, with internal cost-saving activities<br>• Various departments started their own improvement projects and ignored Sun Sigma concepts<br>⇒ *Resistance by various managers against Sun Sigma challenged the position of CAO and Sun Sigma as valuable business partners for their departments* |
| (6)<br>• Mobilise certified Sun employees and project members to promote Sun Sigma | • Decreasing commitment by project members reduced results of Sun Sigma projects | • People started to follow their local departmental managers and re-focus their attention away from Sun Sigma projects<br>• People reduced their project commitments and Sun Sigma projects started not to deliver the results expected<br>⇒ *Sun Sigma project members (green and black belts) followed their managers and their reduced commitment to Sun Sigma engagements* |

### 5.3.2 Interaction between Strategic Initiatives

The Sun Sigma initiative affected other initiatives and was affected by them in turn. These effects emerged during a period of various ongoing strategic (change) initiatives which were part of Sun's overall strategic change and improvement programme as described in the company introduction section. The implementation of the Sun Sigma initiative gave rise to various effects due to different challenges: *compliance issues between initiatives*, *challenging dependencies between initiative goals and objectives*, and *facilitation of initiative challenges through project proliferations*. Identifiable in this context were three initiative-oriented drivers which produced different effects between the Sun Sigma initiative and other initiatives. These drivers were very similar to those observed between the effects of the Sun Sigma initiative and Sun's organisational context. They are illustrated in Figure 12, which shows the Sun Sigma initiative-oriented main driver, which created different challenges with emerging effects between the Sun Sigma initiative and other initiatives.

Firstly, the Sun Sigma initiative and related Sun Sigma projects affected other ongoing initiatives through the ability of the Sun Sigma initiative to change the actual project priorities ("Authority to reach strategic goals") and tactical efficiency goals, which created various resource re-allocation and re-prioritisation effects within other initiatives. Secondly, because of the close relationship between CAO and the Sun Sigma knowledge, the initiative team members were able to increase and reduce the Sun Sigma relevant expertise and priorities in other ongoing and planned initiative through the allocation and re-allocation of mandatory Sun Sigma expertise (new project policies; mandatory engagement of an Sun Sigma expert) and project representatives - "Sun Sigma Knowledge and skills". Moreover, other initiatives were forced to adopt new Sun Sigma approval processes (e.g. Gate-Concept). Those approvals were managed by the Sun Sigma experts from CAO, who decided whether the projects were able to progress to the next stage, or whether the milestones were insufficiently fulfilled or the programme goals should be changed.

Figure 12: Context of interactions between the Sun Sigma initiative and other initiatives.




Thirdly, the strong influence of the Sun Sigma initiative on CAO and Sun's executive steering boards and the executive coaching panel enabled the Sun Sigma initiative to drive decisions ("Decision support/Mgmt. support Driver") across executive levels when a choice had to be made between the Sun Sigma initiative and other initiatives. In sum, these drivers were identified as sources of the observed challenges in the context of the initiative from which the effects between the Sun Sigma initiative and other ongoing initiatives emerged.

#### 5.3.2.1 Compliance Challenges between Strategic Initiatives

The Sun Sigma initiative managers were forced to apply the application of Sun Sigma to other key initiatives to enhance other initiatives within the Sun Sigma concept. In this context, the initiative created additional Sun Sigma compliance issues between strategic initiatives with different implications. Before the Sun Sigma initiative was launched, Sun employees had struggled with the wide range of new tools, frameworks, and methods established through different initiatives, such as the new CRM tools, new sales planning and forecast tools and processes, new partner management concepts, new deal management concepts, etc. Almost every strategic

initiative used and established its own tools, frameworks, and methods, and this 'overloaded' Sun's employees. Moreover, every strategic initiative had its own definitions and acronyms, which produced more complexities, misinterpretations, and confusion among the various project teams and lines of business.

> *'I think get organized and slow down tools and methodologies, we have too many initiatives, too many acronyms too many ...we really need to be more delivery oriented.* (Senior Project Manager & Strategic Sun Sigma Projects, 2004, [2])

The aim of the Sun Sigma initiative was to consolidate the various tools and frameworks used by the other strategic initiatives and replace them with standardised and approved Sun Sigma tools, frameworks, and methods. The Sun Sigma initiative started to use its close relations with CAO and Sun's management decision layer to consolidate and standardise the top-downwards existing methodologies and concepts within the different initiatives.

> *'...They did something big to develop the 'Top Down' which was not a bad idea. The goal was to get every VP (Vice President) trained on Sigma and to get them to understand the method and to understand how to receive a financial benefit in the end. The first wave was done for VPs, the highest management layer, the second wave included directors...'* (Senior Program Manager & Sigma Black Belt, 2005, [21])

The consolidation processes exerted by the Sun Sigma initiative on other initiatives were conducted in two steps. Firstly, the decision makers from other initiatives were invited to learn more about Sun Sigma and how the new tools and methods could be applied to their strategic initiatives. Training and coaching sessions were organised in regular management cycles and steering boards. VPs and management teams from all

initiatives were organised in different boards to meet regularly and discuss their progress in applying Sun Sigma. Secondly, Sun Sigma experts (MBB's) were appointed to coach different VPs as the VP at that time responsible for the CRM Convergence initiative.

> *'I was appointed to coach our VP; he was responsible for a few strategic initiatives within the EMEA time zone, including the CRM Convergence initiative...I tried to convince him to become a Sun Sigma advocate. It was difficult; it was really difficult ...his attention and energy was focused on fulfilling his quarterly goals and figures. On the other hand, he was quite supportive for pushing Sun Sigma because this was the direction defined by the top management'* (Sun Sigma Master Black Belt (MBB), 2005, [38])

However, coaching and promoting Sun Sigma within the management teams to standardise and align ongoing strategic initiatives like CRM Convergence to Sun Sigma created different challenges and complexities. Firstly, the CRM Convergence teams were 'invited' to attend Sun Sigma training sessions to apply Sun Sigma methods and frameworks in their ongoing projects. In this context, the management steering board decided that every project must have a Sun Sigma expert (champion) in the project team.

> *'...Every project had to have a champion – VP level, later at least director level...'* (Senior Program Manager & Sigma Black Belt, 2005, [21])

The aim was to enhance the current initiative work with Sun Sigma knowledge. Nevertheless, Sun Sigma hampered progress within other initiatives, whose team members were taken up with new Sun Sigma concepts, methodologies, templates and definitions. The result was that the initiatives, other than CRM Convergence,

increased their Sun Sigma knowledge, and, at the same time, this additional Sun Sigma knowledge created confusion, misinterpretations, and complexity, as well as slowing down progress. The project teams lost their focus on the initiative's original measures and targets.

> *'...We were forced to apply the Sigma methodology and tools to our problem solving activities. At the end you don't need a fancy methodology to figure out how to get from problem definition to solving ...People felt themselves become slower and slower by using the new methodologies and tools'* (Senior Project Manager & Strategic Sun Sigma Projects, 2004, [2])

Secondly, instead of enhancing the initiative, they became Sun Sigma advocates who sought to convert the existing results into the new Sun Sigma language. Overall, the initiative became static because it followed the new Sun Sigma methods absolutely. People felt they had lost their creativity and ability to think outside the box.

> *'...We stopped thinking outside the box. For example Sun created a two-day workshop template, so called Sun Shot; it was used to solve different kinds of problems and speed up solution finding. You collect some data in advance, then you come together, discuss the data and decide on the solution and its implementation. However, our problems were too complex to solve in a two-day Sun Sigma Shot'* (Senior Project Manager & Strategic Sun Sigma Projects, 2004, [2])

> *'...we dissipate our project time with these Sigma tools and methodologies rather than focus on solution*

*finding and problem solving...'* (Senior Project Manager & Strategic Sun Sigma Projects, 2004, [2])

In the past, Sun employees had had the freedom to select their own methods and tools to solve existing problems. This ability started to be replaced by Sun Sigma. Overall, the Sun Sigma initiative aimed to improve several aspects within other initiatives through various actions, and this had different effects.

Table 17: The effects and their implications

| Initiative Activities | Effects | Implications |
|---|---|---|
| (7)<br>• Apply Sun Sigma to other initiative teams and project members to increase Sun Sigma programme knowledge | • Increase of Sun Sigma knowledge within other initiatives increased complexities and slowed down progress | • Programme teams started to attend regular training sessions and Sun Sigma meetings and reduced their everyday project work<br>• Additional templates, methods, and concepts increased the complexities of 'translating' existing results and methods into Sun Sigma concepts and processes<br>• New Sun Sigma methods created confusion and misinterpretations between initiatives on definitions and reduced project results<br>⇒ *Additional Sun Sigma knowledge within other initiatives reduced project work and increased coordination and alignment of Sun Sigma between initiatives* |
| (8)<br>• Consolidate various tools, methodologies, and project approaches | • Adopting Sun Sigma processes and guidelines reduced people's commitment and creativity and increased project costs, inefficiencies and timelines | • Mandatory Sun Sigma experts in each projects increased project costs, alignment times between team members, and the motivation of other team members to facilitate progress in project work<br>• People reduced their performance and replaced problem solving activities with the fulfilment of Sun Sigma 'checklists', with the result of increased delays in delivering results<br>• People did not accept all Sun Sigma methods as effective problem solving methods and tools, so that inefficient work between team members increased<br>• People lost their freedom to solve business issues and their commitment to applying Sun Sigma concepts decreased – people started to reduce their project involvements<br>⇒ *The consolidation of existing initiative approaches, templates, processes, and methods increased confusion and reduced commitment to follow Sun Sigma guidelines* |

### 5.3.2.2 Challenging Interdependencies between Initiative Goals and Objectives

Challenging interdependencies between initiative goals and objectives in the context of the Sun Sigma initiative produced different effects, which can be described in detail using the following three examples.

The first example concerns the alignment efforts between the Sun Sigma initiative and the CRM Convergence initiative. CRM Convergence impacted on Sun Sigma's objectives and goals to generate various effects. According to the CRM Convergence initiative and overall customer orientation, an increasing number of executives requested that every initiative, including Sun Sigma, should drive and utilise customer values. Sun Sigma should determine the goal and level of the improvements required primarily (if not exclusively) by Sun's customer input. Hence, Sun Sigma was increasingly required to create and demonstrate customer values. The further objective of the Sun Sigma initiative was to "completely satisfy customer requirements and profitability" together with existing process excellence objectives. The new objective was stimulated by various customer-oriented initiatives, such as CRM Convergence, Global Field Development (GFD), and Partner Operations. Sun acknowledged, however, that not all of its customers required customer services at the Six Sigma level. Thus, the company wanted to understand the customer requirements thoroughly and set appropriate Sigma levels for each customer, service, product, and process. In this example, the Sun Sigma initiative team was forced to align the existing objectives and goals with the additional customer oriented improvement objectives already covered by the CRM Convergence initiative. Those alignments between the two initiatives produced resource inefficiencies because additional initiative costs were required for more Sun Sigma project resources. Hence, the Sun Sigma initiative started to address customer improvement issues overlapping with the CRM Convergence initiative, with the consequence that existing Sun Sigma activities slowed down and inefficiencies across initiatives increased.

> *'...I couldn't understand why we increasingly started to focus on customer issues ... the CRM initiative already*

> *covered most of the identified customer gaps. Our Sun Sigma activities started to cover those issues ... and our original plans to establish operational efficiencies slowed down.*' (EMEA Sales Operations & Sun Sigma Projects, 2006, [46])

The second example illustrates how the GFD initiative failed to fulfil some of its objectives and created inefficient overlaps between initiatives by increasing the scope of Sun Sigma. The aim of the GFD initiative was to develop competitive service offerings and train sales forces to sell them in the market. Managed Services was one of Sun's new service offerings, and it can be described as a special type of outsourced service. Sun customers could operate their data centre infrastructure (computing systems etc.) with Sun experts without selling their organisation and infrastructure to Sun (outsourcing contracts). The client was still the owner of its computing infrastructure and IT-departments. Sun simply provided additional operating knowledge and skills through on-site teams for their customers. These teams took care of the existing client environment and helped the clients to optimise their IT-operations and IT-costs. The GFD initiative was tasked with developing an overall quality level for their managed services. The initiative team was behind the milestone plans and timelines, while the core team 'used' Sun Sigma to compensate for their necessary programme workloads.

> *'The GFD team was lagging behind their plans. They started to use Sun Sigma to meet their resource needs and to reduce their program scopes. Everything which could be done by Sun Sigma was requested by the GFD team to be done by the Sun Sigma initiative as the new SLA concept for the new service offering managed services.'* (Senior Project Manager & Deal Manager (CH), 2006, [39])

The GFD programme core team mobilised the initiative sponsors and asked the executive level for additional programming resources to develop Sun Sigma oriented quality levels. The decision board decided that Sun Sigma should take care of this important GFD initiative objective and increased the scope of Sun Sigma. Hence. the effects of the inefficient overlaps between the initiatives emerged because both spent resources and time on fulfilling this objective.

The third example describes how Sun Sigma increased the barriers against the BSC initiative's (BSC = Balanced Scorecard) ability to fulfil the defined BSC objectives. Those barriers reduced the BSC's progress and led to a request for more time and resources which increased the BSC initiative's overall costs. The aim of the BSC was to break down Sun's strategy and strategic objectives into their various organisational layers and make the strategy more measurable. The BSC initiative consequently tried to collect and consolidate all used and operationalised KPIs (KPI = Key Performance Indicator) and dashboards. Moreover, the wide range of individual Sun Sigma projects that had already begun continued to develop further KPIs and dashboards for specific business problems and project cases. This flood of KPIs and dashboards comprised inconsistencies and KPIs contrary to Sun's overall strategic direction. The BSC team discovered that a large number of KPIs were useless for measuring Sun's strategic performance. Moreover, these KPIs were sometimes at odds with Sun's strategy. However, different department and teams relied in their daily business activities on these controversial KPIs and dashboards.

> *'We had a wide range of different and controversial KPIs - as for example the Partner Operations initiative used KPIs to measure how many deals were executed by our partners as revenue multipliers. Our partners were measured by the number of complex deals they delivered. They were pushed by us to execute as many projects as possible. At the same time we (Sun) tried to establish a project-oriented Professional Services (PS) organisation where we tried to take the lead in setting*

> *up and executing complex client projects. PS had controversial KPIs in comparison to our partner business operations; they were also pushed to deliver as many deals as possible, and ours sales people were measured and controlled on how many products they sold and not on service deals.'* (EMEA Operations Manager & BSC Core Team Member, 2006, [29])

> *'Sun Sigma tries to measure everything. We had far too many dashboards and measures which didn't relate to each other. Every new Sun Sigma project came up with new measures and dashboards.'* (EMEA Operations Manager & BSC Core Team Member, 2006, [29])

These misalignments created barriers and increased the BSC project's obstacles against fulfilling the BSC objectives of providing a set of strategic and integrated measures to monitor Sun's strategy performance. The initiative required more time and resources to analyse and consolidate the company's existing KPI and dashboard landscape, and it encountered resistance from various departments and regional offices operationalising the dashboards and measures established by different Sun Sigma improvement projects. Those dashboards and measures did not provide an integrated and consolidated perspective of Sun's performance because they were established by various Sun Sigma projects to solve and improve specific business issues. Furthermore, the management teams realised that not all Sun Sigma activities could be linked to Sun's overall strategic objectives. In this context, the executives realised that a wide range of Sun Sigma projects was misaligned with the overall company goals.

> *'...Senior VPs like Ellie Simon said "Sun Sigma is a tax I have to pay for"...'* (Senior Project Manager & Strategic Sun Sigma Projects, 2004, [2])

Executives lost their commitment to Sun Sigma and felt that they were being forced by headquarters to finance various Sun Sigma activities and CAO without a clear understanding of how those projects would help to increase the overall company performance and results.

Table 18: The effects and their implications

| Initiative Activities | Effects | Implications |
|---|---|---|
| (9)<br>• CRM Convergence initiative increased executives' attention and commitment to initiative goals and objectives | • CRM Convergence initiative reduced Sun Sigma's performance and increased inefficiencies between the two initiatives | • CRM Convergence produced the overall opinion that Sun Sigma should create customer value<br>• Sun Sigma reprioritised initiative-process excellence improvement activities to customer improvement activities with the consequence of overlaps between the initiatives and requests for more project resources and skills<br>• The change of different Sun Sigma process excellence activities reduced achievement of the expected results and increased overall costs<br>⇒ *Alignment efforts between CRM Convergence and Sun Sigma created challenges on initiative performance and costs* |
| (10)<br>• GFD was unable to achieve its desired goals and objectives on time | • GFD delays and missing results created inefficient overlaps between Sun Sigma and GFD | • The GFD initiative defined some of its goals and objectives as Sun Sigma goals<br>• The transfer of GFD tasks to Sun Sigma created additional workloads within the Sun Sigma initiative<br>• The transfer of GFD tasks created inefficient overlaps between GFD and Sun Sigma activities<br>⇒ *GFD delays impacted on Sun Sigma and created additional workloads and resource overlapping* |
| (11)<br>• The Sun Sigma initiative created various measurements and dashboards to drive fact-based decision making | • The Sun Sigma initiative increased the BSC initiative timelines, resource needs, and efforts to fulfil the BSC goals and objectives | • Sun Sigma dashboards were detached from overall strategic objectives and goals<br>• Sun Sigma dashboards were operationally embedded and various lines of business rely on those measurement and figures<br>• Not all Sun Sigma measures were in line with Sun's key performance indicators and created challenges<br>• Not all Sun Sigma projects supported Sun's key performance indicators and generated only additional costs<br>⇒ *Sun Sigma created barriers against the BSC initiative and increased the BSC's resource needs and timelines* |

### 5.3.2.3 Emerging Initiative Challenges from Uncontrolled Project Proliferation

The management of emerging key projects by the initiative was only the beginning of a series of new Sun Sigma projects across the entire Sun organisation, with different consequences (effects) for the business.

> *'If we look into our global Sun Sigma project registration tool, over the last 18 months we could find over 3000 registered projects around the globe.'* (Senior Program Manager & Sun Sigma Black Belt, 2005, [21])

The initiative started to create an uncontrolled process of project proliferation from the original less than 20 key projects to over 3000 projects across the organisation. This project proliferation arose unexpectedly from the various key activities of the initiative.

The first source of uncontrolled project proliferation was the Sun Sigma training and certification programme managed by the initiative and strongly supported by CAO. People were mobilised to participate in mandatory and standardised training schemes (according to the Sun Sigma objectives) to become green and black belts. The growing audience across the company showed that Sun Sigma skills were developing. However, besides new skills, the Sun Sigma training and certification programme 'encouraged' more and more Sun employees to attend the Sun Sigma training sessions and qualify for a green belt.

> *'Through Sun Sigma we had an inflation of black belts. Every business line started to train people to become green and black belts. These belts had to have a project so the numbers of projects increased and of course the complexity of each individual project. For example, in some of our projects we worked three months only on*

> *the charter to fulfil the Sun Sigma criteria'* (Senior Project Manager & Strategic Sun Sigma Projects, 2004, [2])

The Sun Sigma training community within Sun started to grow, and this stimulated a demand for new Sun Sigma projects. This triggered the process of uncontrolled project proliferation and demand for scarce firm resources within the organisation.

> *'Still today, for a black belt to be certified you have to lead two projects and we have about six or seven black belts in our team. Only one is certified, and as for the other ones - they are still looking for projects. I mean that is where we ended up.'* (Sun Sigma Expert & Special Projects, 2005, [30])

This proliferation of projects had the unexpected effect that key people grew increasingly 'absorbed' with their Sun Sigma certifications and projects. Consequently, widening workforce gaps emerged within different areas of Sun's daily business operations.

> *'Each department was pushed to train and certify a percentage of its staff to become Sigma green and black belts. It was split in X percentage of green and X percentage of black belts. Moreover, X percentages of green belts had to be directors. Then the organisation started to fudge project stories and declared projects to be Sigma projects, which we normally wouldn't do. I think we increased the complexity significantly.'* (Senior Program Manager & Sigma Black Belt, 2005, [21])

Over time, the Sun organisation ran out of resources and did not have enough qualified people to manage its daily business operations. An increasing number of people were required. These employees again started to look for new Sun Sigma projects for their certification, which started to drive the project proliferation through a 'snowball' effect.

The second key source of uncontrolled project proliferation was the Sun Sigma executive steering boards. In this combination, Sun's coaching of managers and executives increased the overall Sun Sigma knowledge and visibility at the executive level and created an increasing number of Sun Sigma oriented projects. The managers and executives discussed on a regular basis how their business could be improved and decided increasingly to launch Sun Sigma projects to improve the identified gaps. Those steering boards and discussion boards were organised and moderated by Sun Sigma experts who influenced the Sun executives to become more Sun Sigma oriented. In summary, the decisions to launch Sun Sigma projects were stimulated through the following aspects. Firstly, the misinterpretations of ROSS (see above) increased the expectations of various managers that Sun Sigma projects could strongly help them to achieve their management goals as the cost reduction and saving measures became clearly outlined through ROSS. At this time, Sun was in a challenging financial situation, with increasing pressure on various executives and managers. These decision makers started to back up their business issues with Sun Sigma improvement projects.

Secondly, the Sun Sigma steering boards did not cover all of the needs of different regions of the company. In this context, the decision power and competencies for launching new Sun Sigma projects were decentralised and delegated to the various time zones.

> *... We talked elegantly about a decentralized model... This actually means that every time zone did whatever it wanted - this really happened.'* (Senior Program Manager & Sigma Black Belt, 2005, [21])

The decentralisation of the new Sun Sigma projects facilitated the initiation of new projects. Every office started to launch independently new Sun Sigma projects to address their local business issues.

The third aspect to stimulate new Sun Sigma projects were closely related to the second aspect – individual departments and time zones cross-financed CAO and new Sun Sigma projects. The executives reclaimed those budgets by requesting and launching individual Sun Sigma projects to receive at least some kind of return on their internal Sun Sigma payments. These activities increased the overall demand for new projects, with the consequence of growing project activities.

The fourth and last aspect relates to the MBO of Sun's executives. The Sun Sigma initiative, in correlation with CAO, developed additional goals and objectives for Sun's management teams. Those objectives included, besides mandatory training, the participation in at least one Sun Sigma project and the development of one proposal, which outlined three potential areas of improvement through Sun Sigma. Those proposals became the baseline for new improvement projects. Accordingly to Sun's management community of between 3000 – 5000 managers (between 10 – 15% of the staff), nearly every third proposal was implemented through a Sun Sigma project.

With regard to project proliferation, based on the stimulation from the global Sun Sigma training programmes and the Sun Sigma steering committees, the Sun Sigma initiatives increased their activities progressively. The Sun Sigma initiative can be defined in terms of the total number of ongoing projects within Sun – which amounted to between 3000 and 4000 projects around the globe. Those Sun Sigma projects were part of the Sun Sigma initiative and acted as additional multipliers of the described effects of the various challenges. Figure 13 illustrates how the Sun Sigma initiative increased its project dynamics by launching additional Sun Sigma projects, and how those projects increased the possibilities of different challenges and different effects.

Figure 13: Sun Sigma project multiplier effect on other initiatives

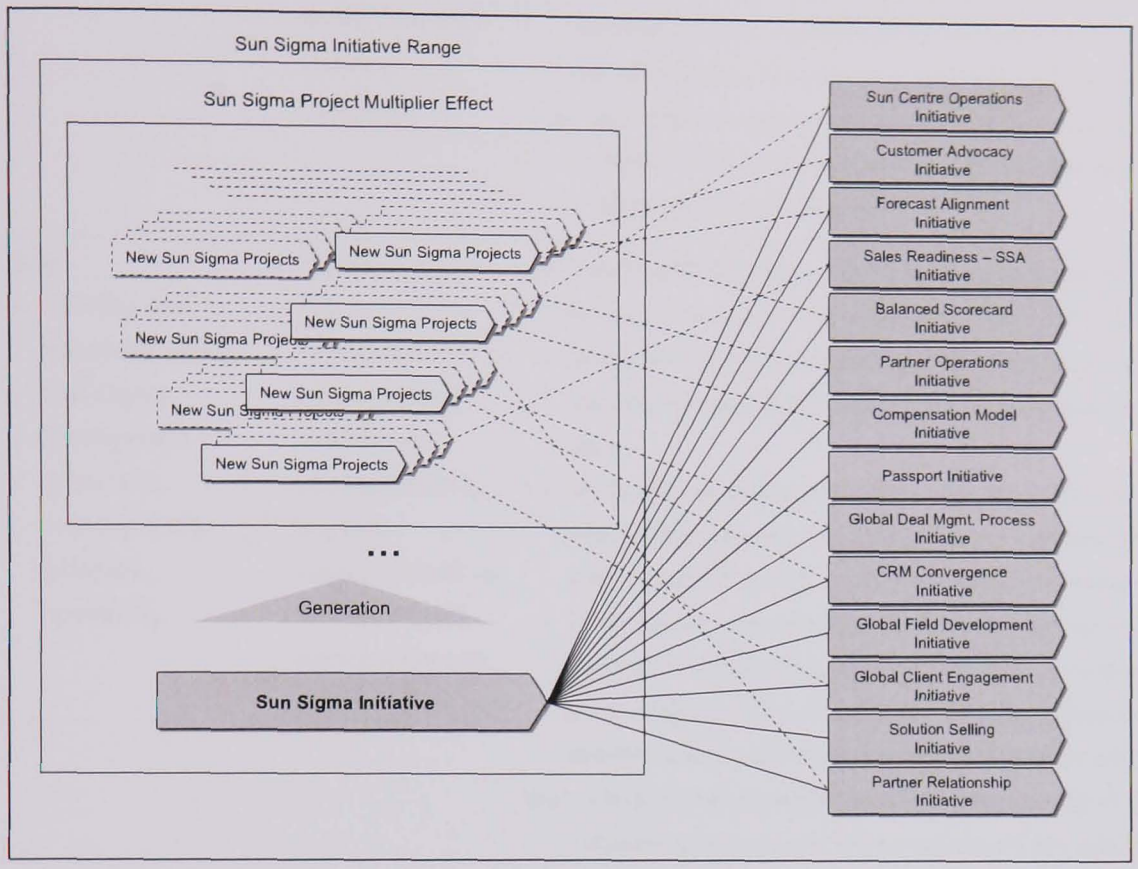



Figure 13 describes the Sun Sigma initiative range that was built on the growing dynamics of new Sun Sigma projects. It illustrates various additional possibilities for effects between other initiatives and the Sun Sigma initiative stimulated by new Sun Sigma projects (project proliferations). These initiatives relate to the Sun Sigma initiative and increased massively over time, as illustrated in Figure 13. Furthermore, both activities, the global Sun Sigma training programmes and the Sun Sigma steering committees, were supported and facilitated through the new Sun Sigma company portal, where the employees were able to obtain Sun Sigma related information, share their experiences, and collaborate with other Sun Sigma experts within the wider organisation. In this context, CAO increasingly became the central organisational unit for Sun Sigma activities and decisions.

Table 19: The effects and their implications

| Initiative Activities | Effects | Implications |
|---|---|---|
| (12)<br>• Increase Sun Sigma know-how | • Increase in Sun Sigma knowledge reduced workforce | • Training and certification programs absorbed people from their daily work and business operations<br>• People were forced to attend Sun Sigma trainings and project |

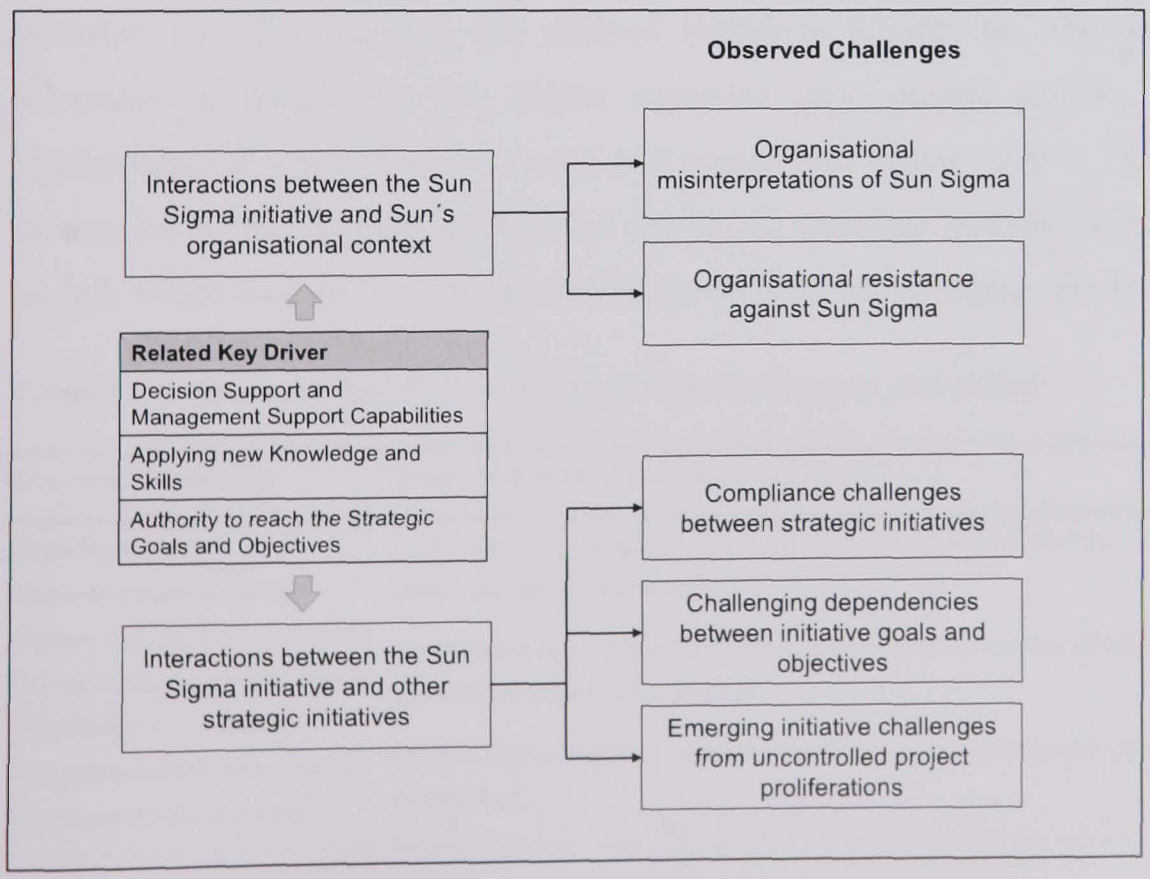
| | | |
|---|---|---|
| across the organisation | power and resource gaps emerged during everyday business operations | meetings<br>• Training and certification programme increased the number of certifications and experts (green and black belts) and increased demand for new Sun Sigma projects to fulfil the certification criteria<br>⇒ *Sun Sigma improvement projects became 'certification'- driven instead of business issue- /result-driven and stimulated the Sun Sigma project proliferation* |
| (13)<br>• Defining and launching various Sun Sigma improvement projects to improve Sun's business operations | • Increase in Sun Sigma projects reduced overall efficiencies as CAO focus changed from an support organisation to an internal project coordination and administration unit | • Claiming ROSS and expecting measurable results stimulated various managers to start new Sun Sigma improvement projects<br>• Uncontrolled proliferation of Sun Sigma projects increased the demand for scarce firm resources and increased overall project costs<br>• Managers expected from their cross-financing activities to CAO measurable paybacks in form of new Sun Sigma projects within their departments and supportive Sun Sigma expertise<br>• Uncontrolled proliferation of Sun Sigma projects increased the demand for support activities within CAO – CAO focus drifted from enhancing Sun's line of business with Sun Sigma knowledge to internal project coordination and administration activities<br>⇒ *Uncontrolled proliferation of Sun Sigma projects stretched Sun's scarce resources and increased overheads within Sun's organisation* |
| (14)<br>• Supporting decisions to launch Sun Sigma projects to fulfil the Sun Sigma process excellence goals | • Increase in Sun Sigma projects reduced process excellence achievements | • Decentralized organisational structures and decision boards on new Sun Sigma stimulated new Sun Sigma projects in various local regions and business units<br>• New Sun Sigma projects were launched in increasingly decentralised manner by local departments and executives with the consequence of growing overlaps and inefficiencies<br>• Similar New Sun Sigma projects were launched independently and were misaligned with each other<br>⇒ *The 'snowball' effect of uncontrolled project proliferation reduced control over Sun Sigma projects and reduced the focus on consolidated process excellence areas* |
| (15)<br>• Multiplying and enhancing Sun's current process excellence improvement efforts with specific Sun Sigma projects | • Multiplication of challenges between the Sun Sigma initiative and other strategic initiatives through additional Sun Sigma projects | • New Sun Sigma projects were launched through the Sun Sigma initiative with the support of CAO<br>• New Sun Sigma projects addressed specific gaps to increase/utilise ROSS<br>• Sun Sigma projects were structured and managed according to Sun Sigma project phases, methodologies and templates<br>⇒ *Growing number of de-centralised Sun Sigma projects, as part of the overall Sun Sigma initiative, generated effects between Sun Sigma and other initiatives* |

## 5.4 Summary

The intention in undertaking a case study of Sun Sigma was to investigate which kind of challenge emerged during the transformation of Sun's existing business operations, according to the strategic initiative objectives and goals. In detail, the aim of the Sun Sigma initiative case study was to investigate which challenging effects emerged from the interactions with Sun's organisation and between other strategic initiatives. In the context of the Sun Sigma initiative, those interactions created different challenges from which various effects between the initiative and Sun's organizational context and between the initiative and other initiatives emerged.

The challenges observed reflect a group of effects which evolved from an interaction between the Sun Sigma initiative and Sun's organizational context or from an interaction with other strategic initiatives. In relation to the Sun Sigma initiative, three firm specific capabilities could be identified as the key drivers in stimulating the creation of the five classified challenges and related effects, as summarised in the following figure.

Figure 14: Related key driver and observed challenges within the Sun Sigma initiative.



The figure illustrates the main drivers identified as stimulating the five different challenges, classified into the two types of interaction. The first driver relates to the capability of Sun's *decision support and management support capabilities,* which includes the firm-specific decision support and management support processes with reference to the Sun Sigma initiative. Sun Sigma received strong management support to implement the Sun Sigma objectives across the company. In this regard, the Sun Sigma initiative utilized their ability to influence the management teams in accordance with the Sun Sigma objectives to align other strategic initiatives with Sun Sigma related aspects. The second driver relates to Sun's capabilities to *apply new knowledge and skills* to the organization and other strategic initiatives to renew and facilitate the fulfilment of the defined strategic objectives and goals. The third driver is summarized as Sun's capability to manage, especially to exert *the authority to reach the strategic goals of the Sun Sigma initiative* to drive the implementation of the different ongoing strategic initiatives, including the Sun Sigma initiative. The driver implies the capability of prioritization and includes the ability of the company to define the necessary authorities for the Sun Sigma initiative to achieve its strategic goals and objectives. In particular, the close relation to CAO and the objective to distribute and establish Sun Sigma knowledge across the organization and other initiatives' challenge Sun to increase and reduce the Sun Sigma relevant expertise and priorities on other ongoing and planned initiatives through the allocation and re-allocation of mandatory Sun Sigma expertise (new project policies; mandatory engagement of a Sun Sigma expert) and scarce Sun Sigma project experts. These drivers led to the challenges observed during the strategic initiative implementation period, which included the appearance of the observed challenging effects.

Table 20: Summary of Sun Sigma initiative related challenges and effects.

| Observed Challenges | Emerged Effects (Observed Examples) |
|---|---|
| **Organisational Misinterpretation of Sun Sigma:** This situation is defined through different interpretations, expectations and different supporting activities/decisions of various involved actors. | (1) Focus Shift of the Sun Sigma initiative with emerging conflicts and complexities within the Sun Sigma initiative.<br>(2) Different org. perspectives reduced expected Sun Sigma initiative progress on the defined objectives and goals.<br>(3) Sun Sigma Initiative facilitated the decrease in applying and utilizing existing firm capabilities. |

| | |
|---|---|
| **Organisational resistance against Sun Sigma:** This situation reflects how resistance by involved actors increased the barriers and challenges tagainst progress with the Sun Sigma initiative. | (4) Sun Sigma orientation/concentration decreased acceptance of Sun Sigma related initiative activities<br>(5) Increasing managerial resistance against Sun Sigma reduced Sun Sigma initiative support<br>(6) Decreasing commitments of Sun Sigma project members reduced Sun Sigma initiative progress |
| **Compliance challenges between strategic initiatives:** This situation is characterised through the Sun Sigma efforts to apply Sun Sigma to other strategic initiatives. | (7) Increase of Sigma knowledge within other initiatives increased complexities and reduced progress by other initiatives<br>(8) Sun Sigma standardisation increased complexities and confusion between initiatives and project team members |
| **Challenging dependencies between initiative goals and objectives:** this situation defines the situation where two strategic initiatives engaged in dependencies between initiative individual goals and objectives with the consequence of evolving challenges. | (9) Sun Sigma related alignment efforts created challenges and issues between different initiatives<br>(10) Sun Sigma orientation increased delays and inefficient resource allocation overlapping between initiatives<br>(11) Sun Sigma initiative created barriers for other initiatives and increased scope for other initiatives |
| **Emerging initiative challenges from uncontrolled project proliferations:** this situation illustrates how uncontrolled proliferation of new Sun Sigma projects increased the observed effects and created multiplier effects across Sun. | (12) Increase of Sun Sigma knowledge created additional resource needs and workforce gaps<br>(13) Growing number of Sun Sigma project increased overheads within Sun's organization, operations, and reduced resource allocation efficiencies<br>(14) Growing number of Sun Sigma projects stimulated misalignments between project goals and decreased results of other projects (decrease of consolidated process excellence results)<br>(15) Multiplication of Sun Sigma projects as part of the Sun Sigma initiative reduced Sun's project resource allocation control and stimulated additional effects with other initiatives and the organization. |

In 2007, the Sun organisation officially finalised its global Sun Sigma initiative and the management team claimed that "Sun Sigma is now in the DNA" of Sun Microsystems, Inc. based on the improved financial performance and positive quarterly results. "Voices" in the company claimed that Sun Sigma was essential for the evolution of Sun Microsystems, Inc. and that the initiative was a strategic step that would be noted by its customers, partners, and competitors. However, other "Voices" from different departments still claimed that, after 2007, Sun Sigma was too expensive, difficult to measure and led nowhere, with the consequence that Sun's

management team decided to reduce its Sun Sigma investments unofficially. In this regard, the case study conducted may provide answers regarding why Sun Sigma was recognized as difficult, expensive and sometimes challenging for Sun, according to the effects which emerged from the different initiative related challenges. All of the challenges and effects in the table refer to the Sun Sigma initiative and related interactions between Sun's organizational context and other strategic initiatives. Overall, the Sun Sigma case study illustrates how various effects evolved with sometimes challenging consequences and difficulties for Sun Microsystems, Inc.

# 6 The CRM Convergence Initiative Case Study

## 6.1 Introduction

Stagnating IT product markets induced Sun to focus on its customer relations and to launch the CRM Convergence initiative to transform their existing well-established transaction- and product-based sales approach into a more customer-centric and collaborative sales one. Furthermore, Sun had little customer knowledge and no deep client relationships in its global key customer base, and customers demanded more integrated business solutions instead of single hardware and software products.

Sun's management team held close discussions with the Siebel management team to examine the benefits of different CRM projects around the globe. At that time, Siebel transformed and implemented global CRM initiatives at Sun's competitors, such as IBM and HP. Both companies claimed that their CRM initiatives strengthened the effectiveness of the company's sales force and increased their overall competitive advantage.

On the basis of the paradigm shifts in the markets and the growing intensity of the assault by Sun's competitors on Sun's customer base, the management team defined the CRM Convergence initiative as a strategic enabler to facilitate two strategic firm directions: firstly, the protection of Sun's current customer base through the improvement of existing customer satisfaction and loyalty rates; and, secondly, the ability to enter new markets and customer segments by providing valuable and integrated customer solutions based on comprehensive customer knowledge and collaborative engagement skills. Both directions required changes to the existing company structures and capabilities. In this regard, the CRM Convergence initiative rolled out various change enhancements to Sun's current resource base, including new customer-centric organisations, processes, routines and tools. Moreover, the CRM Convergence initiative became part of Sun's strategic endeavour to put future business strategies in place and operate more effectively with their customers and markets. Overall, the management manifested a concern to put the customer at the

centre of all business operations, thus enabling the firm to strengthen its competitiveness, increase its sales activities, and dissuade customers from defecting to Sun's competitors.

The following in-depth case study discusses how the CRM Convergence initiative interacted with Sun's environment, and especially with its organisational context and other strategic change initiatives. These interactions generated different situations and had various challenging effects on the CRM Convergence initiative, other initiatives and Sun's organisational context. The first section describes the CRM Convergence initiative, especially why it was launched (the rationale) and the objectives and goals that Sun defined for it. The next section illustrates how the initiative was implemented, by outlining how the CRM Convergence initiative interacted with the company's organisational context and other strategic initiatives, and the challenging effects that arose from those interactions. The last section illustrates and summarises the overall findings of the CRM Convergence initiative case study.

## 6.2 Rationale of the CRM Convergence Initiative

In 2000, after a successful period of growth in terms of revenue and margins, the management team of Sun Microsystems launched the CRM Convergence initiative. The aim was to create a more customer-oriented organisation by placing Sun's customers at the centre of all business operations, and to address the paradigm shifts ongoing in the market. The market conditions and customer behaviour had changed, with customers starting to demand more integrated business solutions instead of single hardware and software products.

> *'...and everyone appeared to see that there was a huge paradigm shift going on in the market...'* (Senior Sales Manager & Customer Representative, 2004, [1])

> *'...We have simply failed to live up to the expectations of our customers ... I also believe that we could be doing far more to ensure that customer systems are*

> *configured for availability and that we escalate and manage problems in a more pro-active way...'* (EMEA Vice President, 2004, [40])

This was because it was simply impossible for enterprises (customers) to meet the return-on-investment targets unless the hardware was accompanied by substantial value added by the business-process-oriented services. As a consequence, IBM shifted its emphasis to the services and announced in 2001 that 60 percent of the company's revenues and 75 percent of its profits were derived from software and services. Vendors like Hewlett-Packard, Compaq and Novell took note of IBM's results and they too began to emphasize services. This should have benefited those vendors who acted quickly and followed IBM's example by making services the core of their offerings, not just a secondary channel for selling hardware. This was what the IT buyers needed after 2000, and increasingly what they started to demand. In this context, by making services the core of its offering, Sun started to discuss changes in the firm's existing business mix.

> *'...our customer relations were certainly transaction orientated. It was slightly remote. Computers were bought and Sun did not really care what business issues or problems were solved. It can generally be stated that computer systems and software were bought because of technology's sake. There was a perceived view in the market place that increased investments in Information Technology would make companies somewhat more productive.'* (Senior Sales Manager & Customer Representative, 2004, [1])

However, in the past, transaction-oriented product selling had been one of the reasons for Sun's strong business growth and stable margins. The company successfully developed these sales capabilities to handle sales transactions and, at the same time, cover a wide range of geographical regions with their existing sales teams. In 2001,

Sun claimed a 55% worldwide market share of business servers (UNIX shipments), which was more than that of IBM, HP and Compaq combined.[1] Sun led the field in terms of revenue – outpacing HP by approximately 10% and IBM by approximately 17%. In the US, Sun grew in the sphere of server products (UNIX market share - both shipments and revenue), while IBM's and HP's shares declined.[2] The server product (Sun Fire line) grew by 39% in terms of shipments (significantly outpacing IBM's pSeries) and by 22% in revenue, compared to previous quarters. In 2001, for the first time, Sun was ranked first in terms of revenue in the High Performance Computing/Tech server market, followed by Compaq, HP and IBM.[3] These successes were built on Sun´s transaction-oriented sales capabilities, which became irrelevant as market conditions and customer behaviour changed. The customers reduced their IT expenditure and requested more business value and solutions from Sun, which conflicted with Sun's existing sales capabilities. Decreasing IT budgets heightened the competition between Sun and companies like HP, IBM, Microsoft, Dell, etc. which exploited the shift in customer behaviour as an opportunity to sustain their market share within decreasing the IT budgets and offered an increasing number of business solutions. Nevertheless, like many players in the industry, Sun Microsystems recorded a significant drop in revenue after 2001. In this context, Sun realised that substantial changes were necessary.

> *'Corporate [Sun Executive Board] realized more and more to change direction and drive solution selling. We [Sun] need to change our current company capabilities and assets to be profitable in the future'* (CFO Sun Central/Northern EU & CRM Core Team, 2005, [7])

Sun started to sustain and extend its customer base by transforming the company's current capabilities into more customer-centric business operations, including competitive solution offerings. Therefore, the CRM Convergence initiative became of

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[1] Source: DataQuest WW Server Marketview Statistics, 3QCY01, 11/15/01
[2] Source: DataQuest US MarketView, 2QCY01, 11/09/01
[3] Source: IDC HPC Tech server market, 1HCY01, 11/01

major importance for the company in sustaining its existing customer base by enhancing its existing capabilities.

### 6.2.1 Definition and Vision of the Initiative

Sun's management team described and defined the CRM Convergence initiative in three key respects. Firstly, because the company's product-oriented sales capabilities were focused only on sales transactions, these were insufficient to enable the company to continue its operations. After 2001, Sun had little customer information and no deep client relationships in their global key customer base. Competitors like IBM and HP sought to persuade Sun's customers to convert to their platforms and technologies. In this context, Sun lacked the strong relationships through which to instil confidence in their existing customers.

> *'...The market conditions definitely changed...we now have the situation where we have to actually sell and position our various solutions we have in our portfolio.'*
> (Senior Sales Manager & Customer Rep., 2004, [1])

Secondly, the global sales force was too absorbed in internal processes, procedures, approvals, administration, and challenging sales tools. The customer-facing employees, like the salespeople, IT-consultants, supporters, and alliance managers, could not respond rapidly and reliably to customer requests as "one voice". The company's organisational structures, processes, and tools were not effectively client-oriented. Thirdly, in order to convince the existing and new customers that Sun was a reliable partner and a trusted IT-advisor, the company was forced to provide business understanding, collaborative problem-solving skills and solution-oriented industry offerings. Their existing sales skills and offerings grew increasingly irrelevant. To address these aspects, Sun adopted a region-by-region approach under a global master plan covering all of the necessary topics and activities. These three key aspects led to the definition of the CRM Convergence initiative. Based especially on the first of them, that of transforming the existing sales capabilities, Sun created its vision regarding the sales capabilities necessary in the future.

Table 21: Sun's vision of the new sales capabilities required (Source: Interviewees)

| Sales Capabilities Before 2001 | Sales Capabilities Required After 2001 |
|---|---|
| • Focus on acquiring new customers<br>• Partner-Management, growing the distribution partner network for Sun products<br>• Strong transaction-oriented sales force<br>• Strong sales relations with customers' IT departments and CIOs (Chief Information Officer)<br>• Less customer industry and business knowledge required<br>• Sun services are add-ons to assure product quality for Sun products<br>• Reactive and passive sales processes; customers and partners are ordering Sun products/services | • Focus on protecting current customer base<br>• Project Management business required a network of solution providers and business advisors to enhance Sun's business capabilities<br>• Focus on customer relationship management<br>• Solution selling approach and value proposition required to solve customer business issues (Sun's AIM Framework)<br>• Sales advisory capabilities required to solve business issues and shape customer solutions<br>• Being proactive in leading sales process and partner business |

This was the vision created by Sun's prospects in the future IT market, as software and services became the key elements for solution-oriented offerings in this industry sector. Therefore, the CRM Convergence initiative played a key role in transforming the company's well-established and traditional transaction-based and product-oriented sales approach into a more customer-oriented and collaborative sales one. Furthermore, the initiative sought to strengthen Sun while also protecting the company's global customer base by increasing Sun's effectiveness in approaching future customer segments. In this context, Sun announced, during the initialization of the CRM Convergence initiative, that it would approach five new industries, so that the firm would be less reliant on the traditional industry segments (government, telecommunications, and banking). Sun realized that of key importance for those new industry segments were the collaborative and solution-oriented sales approaches implemented by the CRM Convergence initiative.

### 6.2.2 Strategic Objectives of the CRM Convergence Initiative

Three different delivery elements formed the core of the CRM Convergence initiative undertaken to fulfil Sun's strategic initiative goals. The first was to increase the

effectiveness of the current sales force and customer-facing teams: the programme management team sought to integrate new CRM applications, processes, and to re-design existing business processes and skills to enhance the current sales forces capabilities to operate more effectively with their customers and markets. The second was to increase their knowledge of existing and future customers. Sun started to enable the new CRM applications, which required integration into the Sun business environment and various migrations of current (ineffective) Sun applications and systems. After 2000, the company's existing tools, the related marketing, sales, customer service processes, and organisational structures were too complex and too cost intensive. Moreover, the company's current customer operating model became increasingly difficult to operate. To overcome these difficulties, the initiative endeavoured to implement a customer perspective by establishing a central CRM platform and customer database. This objective required a supportive organisation. Thirdly, in order that Sun could become a customer-centric organisation, it decided to align its current organisations to become more customer-oriented and support the new sales approaches.

> *'Our customers started to request more and more business solutions. If we offer these kinds of solutions, we need to know our customers' business processes. Today, Sun has no clue about our customers businesses...'* (Senior Engagement & Project Manager, 2005, [18])

The above statement reflects the importance of the CRM Convergence initiative for the entire company's operation in future markets. Nevertheless, the company, and especially the executives and programme team members involved, were enthusiastic and started to implement the CRM Convergence initiative objectives in 2001, as summarised in Table 22.

Table 22: Overview of the key objectives of the CRM Convergence initiative

| Key Objective | Description |
|---|---|
| • Increase the effectiveness of the current sales forces and customer-facing teams | • Establish new CRM tools to enhance support for sales teams<br>• Conceptualise and integrate new sales-oriented business processes and the necessary roles and responsibilities<br>• Organize training and coaching sessions to enhance existing sales capabilities |
| • Increase knowledge on Sun's existing and future customers | • Implement the new CRM platform (Siebel)<br>• Migrate existing customer applications and existing databases to the new CRM platform<br>• Establish one central customer database and implement the central customer database within the new CRM platform |
| • Align existing organisations to support new sales approaches | • Align and transform current Sun organisations (PS, SSO, and GSO) to become more customer oriented<br>• Reduce complexities in existing organisational structures so as to increase the efficiency of sales support |

## 6.3 Implementation of the CRM Convergence Initiative

The CRM Convergence initiative was launched by Sun's global executive board to prepare and transform Sun's global sales force and customer-facing teams to suit the future customer and market needs. At that time, Sun was (and remains) a company with a strong "engineering mind-set", so that the roll-out plans for the strategic CRM Convergence initiative resembled a new product or software system roll-out. At the beginning, the management teams somewhat underestimated the fundamental changes that were occurring as a result of changing the company's current sales capabilities and market offerings. Some criticisms were voiced by initiative team members, who pointed out that the initiative did not include sufficient change activities and transformation time. The CRM Convergence initiative included only one of Sun's change acceptance processes, that focused on the assessment of the business process re-design and organisational re-design work. The team members commented that those efforts might prove insufficient to initiate fundamental changes.

> *'I guess Sun underestimated the challenges to transform the product sales people into solution sellers. CRM is more than a system or concept; it is a new customer strategy which requires new skills and competencies. '* (CFO CNE Region, 2006, [41])

Moreover, the change acceptance process was mainly focused on Iberia (a geographical region for Sun which includes Spain and Portugal), as the management sponsor was located in Madrid and primarily focused on his "home region". It would be insufficient to generalise from Iberian activities to the following roll-out waves. However, the executives and teams were motivated, and they communicated their confidence in the CRM Convergence plan (see Appendix 11). In this context, the CRM Convergence initiative was structured as a global programme based on Sun's Prince 2 and Sun Sigma methodologies and guidelines. The uppermost decision and steering level consisted of an executive steering committee comprising members of the global executive management board and various EMEA executives. The

committee had wide-ranging decision powers, management competencies, and budgetary responsibilities. The SBAP (Strategic Business Architecture Team) programme manager regularly reported on the initiative's progress to the executive steering committee. The SBAP programme manager's role was supported by the coordination and administration office (project office) and communication team.

The initiative implemented the strategic objectives in two steps (like many other initiatives), firstly within the EMEA time zone and then worldwide, drawing on the experience and lessons learnt during step one. In detail, step 1 (EMEA time zone) was organised in three phases.

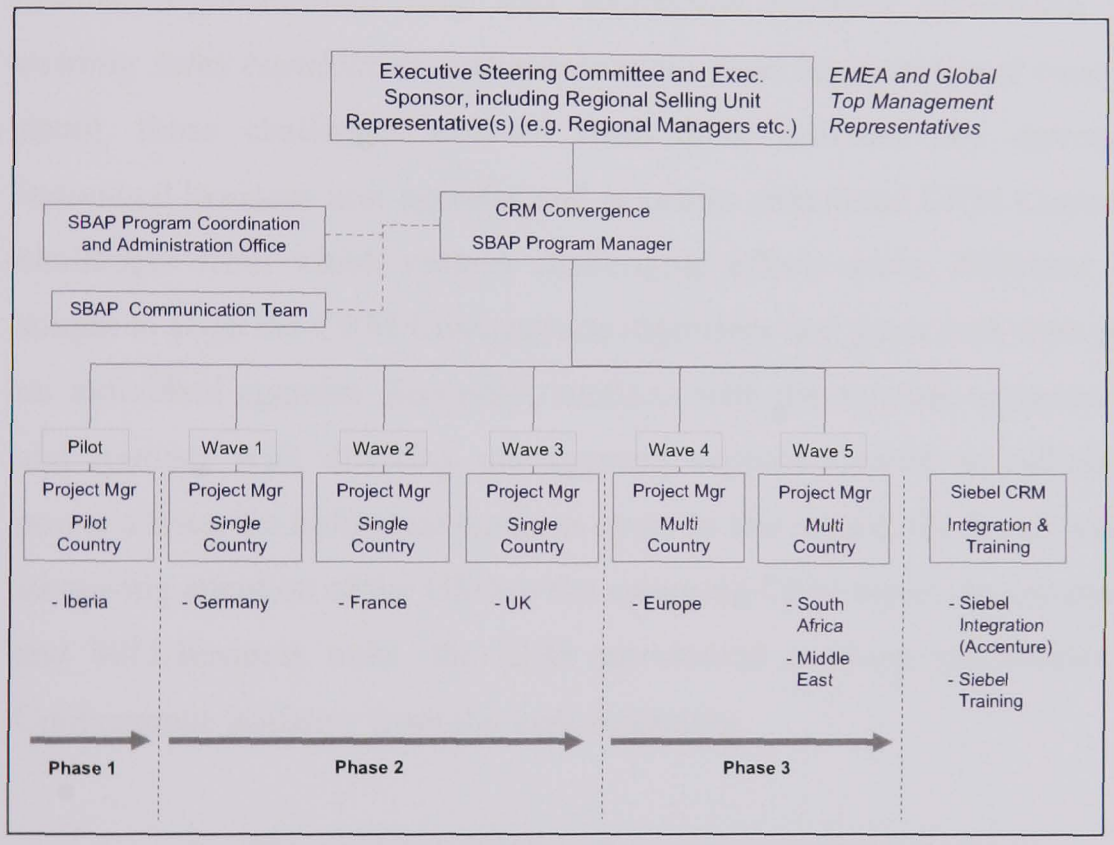
Phase 1 – piloting included a change acceptance process which was to be the starting point for mobilising the parties involved and increasing the awareness of the initiative. In parallel, a data clean-up procedure was launched to prepare for the migration of the current tools and application infrastructures. In addition, phase 1 included a scoping and review activity related to the current organisations and business processes, which was undertaken in order to increase the understanding of potential areas for improvement. Furthermore, the programme team selected Iberia as the pilot region for phase 1. Iberia (the pilot region) was chosen because the EMEA sales operations executive responsible for the initiative was from Spain and had previously been the managing director for Iberia. His ambition was to achieve the company's first success story with the CRM Convergence initiative in Iberia. The Iberia pilot was used to find the best deployment mode of the CRM Siebel system through a proof of concept approach for the next phases.

The second phase sought to utilize the lessons learnt from the Iberia pilot and to roll out the CRM Convergence through three sequential single-country waves, starting with Germany, followed by France and then the United Kingdom.

For the third phase, the SBAP team decided to define the last two waves (4 & 5) as multi-country waves covering more than one country per wave. The programme management team was convinced that it could accumulate sufficient experience and

knowledge to increase the complexities step by step from a pilot region (Phase 1) to a single country region (Phase 2) to a multi country region (Phase 3). The third phase of multi-country region waves should also be used to acquire experience of roll-outs in more than one country simultaneously and to prepare for step 2, which included two additional and larger regions; *North America/Canada/Latin America* and *Asia Pacific*. For both of these regions, the CRM convergence team had to be ready to roll out the initiative in different countries simultaneously, on the basis of the experience curve from previous waves. Figure 15 illustrates the overall CRM Convergence programme structure.

Figure 15: CRM Convergence Initiative Implementation Structure (Step 1; EMEA time zone)




Apart from the different waves, the CRM Convergence initiative supported the three implementation phases with a Siebel CRM Integration and Training team. This team provided integration and support workforces for all regional waves, including the piloting. The team was staffed by external Siebel consultants, Accenture consultants, Sun employees, and trainers. All of these various teams supported the different sub-projects within the three phases in order to ensure the delivery of the strategic elements of the initiative. In this context, during the CRM Convergence initiative's transformation activities, two types of interaction arose, that gave rise to different

outcomes; firstly, the interactions between the organisation and the initiative, and. secondly, the interactions between the CRM Convergence programme and other strategic initiatives. These interactions produced various effects with different characteristics and outcomes.

### 6.3.1 Interactions between the CRM Convergence Initiative and the Firm's Organisational Context

The CRM Convergence initiative interacted with Sun's organisational context. These interactions gave rise to different challenges from which different effects emerged. In the context of the Sun Sigma initiative, three different challenges produced different effects: *organisational silos and misaligned business operations*, *barriers from existing sales capabilities*, and *retroactions from organisational transformations*. In detail, those challenges evolved from three different key drivers. Firstly, the individual business unit agendas and priorities stimulated CRM Convergence-related challenges from which various challenging effects arose. Different business units sought to align the CRM Convergence objectives and goals with their priorities based on individual agendas. Secondly, conflicts with the existing organisational structure and routines with differing management support created an imbalanced decision power among the individual business units. In this regard, the driver was related to the increasing attention of the GSO to the emerging CRM topics. In comparison to the PS and SSO business units, the GSO represented a strong stakeholder of the CRM Convergence initiative from the very beginning.

> *'To establish CRM in Sun, we need to involve and get buy-in from all three business units (GSO, PS, SSO) ... GSO was the strongest business unit in terms of decision power and influence to decide and steer the CRM initiative; it was difficult for the other business units to get really involved ... We know that Scott McNeally (Former CEO and Co-Founder) and the rest of the Executive Management Team have a strong GSO orientation and mindset and always support GSO*

*interests.'* (Senior Executive & CRM Team Switzerland, 2004, [5])

In the context of the CRM initiative, business units like PS and SSO felt penalised and limited in their ability to gain advantage from the CRM Convergence initiative, which increased the risks of the emerging organisational resistance. The CEO and his executive board always gave the GSO organisation higher priority, more resources, attention and trust to drive the business in comparison to PS and SSO. Thirdly, the product-oriented sales capabilities challenged the transformation of CRM Convergence-related activities as the means for the company to become more customer and solution-oriented. Furthermore, the existing sales capabilities created barriers and stimulated the creation of challenges, generating various effects.

Figure 16: The context of the interaction between the organisation and the Initiative.

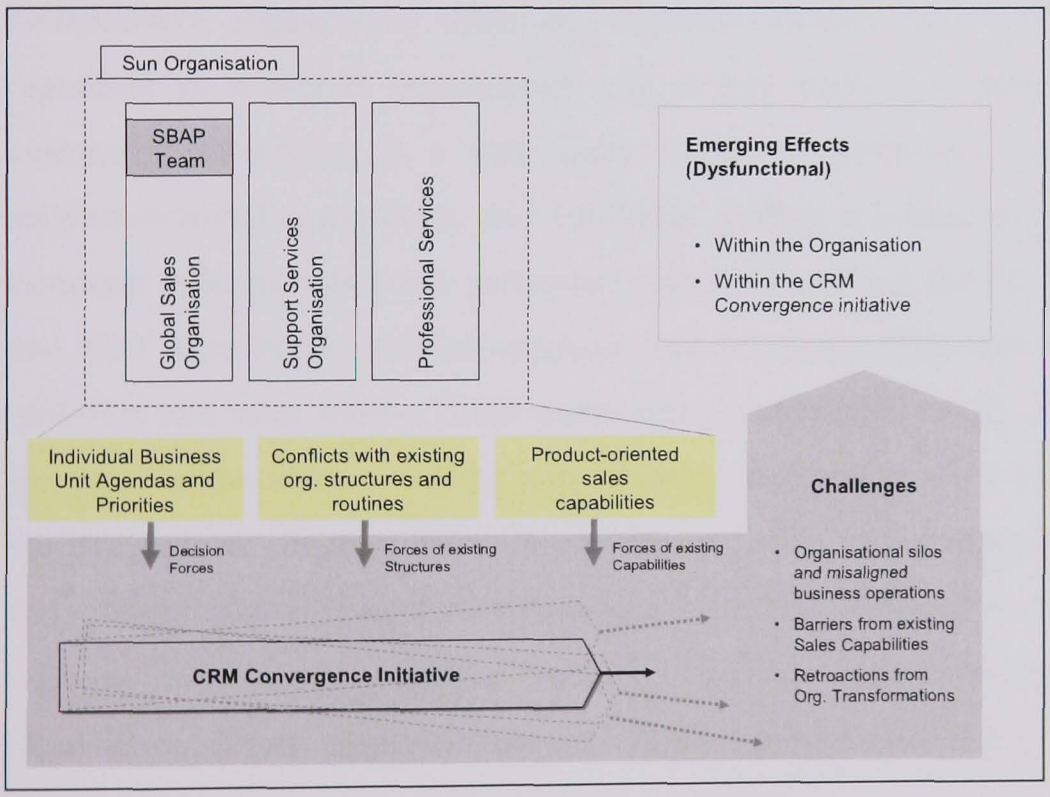



Figure 16 illustrates the context of the CRM Convergence initiative related key drivers from which different challenges arose from Sun's existing organisational structure. From these situations, different (dysfunctional) effects evolved within the organisation and within the CRM Convergence initiative to create different challenges for Sun, which are described in detail in the following sub-sections.

#### 6.3.1.1 Challenges from the Organisational Silos and Misaligned Business Operations

Different challenging effects arose from the existing organisational silos (GSO, PS, and SSO) and their misaligned business operations, as the CRM Convergence initiative was implemented. These effects can be classified into two different groups of effects.

The first group of effects emerged from the asymmetries between the decision power and solution sales capabilities in the context of the three main business units (GSO, PS, and SSO). GSO was the organisational unit with the greatest decision power and influence, followed by the decision power of SSO and PS. PS had the weakest decision power of the three main business units and the most advanced solution sales capabilities of the three. Each single organisation (silos) differed in terms of its collaborative engagement skills and solution-oriented sales capabilities. PS was organised as a project organisation and it was already working closely with its customers. Therefore, at a very early stage, PS developed collaborative skills, solution-oriented capabilities, and mind-sets. Selling solutions as add-ons to various customer projects was not a particularly new undertaking for PS. In addition, GSO and SSO were highly product-oriented, and solution selling was new for the GSO customer and sales teams. These teams had concentrated mainly on product sales in the past, while solution selling and business integration work were transferred to various partners (Bearing Point, Accenture etc.). The consequence was that GSO had the strongest influence on the CRM initiative, and, in comparison to PS, less solution-oriented business understanding, business experience and developed solution-selling capabilities. These asymmetries generated different challenges, which are now described by means of the following two examples.

Firstly, GSO's power to influence the CRM Convergence initiative was used by various GSO executives and decision-makers to support the activities and goals which matched their interests and expectations.

> *' ...We had always, in general, three management positions. Three managing directors: one for professional services, one for support services and one for the global sales organisation. All of them need to speak the same language otherwise the company loses money ...'* (Former Sun Executive & CRM Team Switzerland, 2004, [5])

> *'...every business unit had its own and controversial ideas on how to improve our customer relationship management (CRM)'* (CRM Key Accounts, 2006, [50])

The illustrated citations outline how the three main business units stimulated the challenge of the controversial management expectations, agendas, and business issues. Each organisation pushed its own ideas, requirements and priorities with regard to the CRM Convergence initiative, with the consequence that the necessary decisions were controversial, without consensus and delayed. These delays slowed down the initiative's overall progress, and the overall CRM Convergence initiative objectives and goals started to drift according to the different business unit agendas and priorities.

Secondly, the CRM Convergence initiative developed initiative-specific overheads. In order to manage, address, and integrate the expectations of different organisational "silos", the initiative generated an increasing amount of administration, formal communication and information exchange processes. Initiative team members were constantly communicating with various controversial stakeholders from the PS, GSO, and SSO, and increasingly became the "diplomats" of the initiative.

> *'... it was very difficult to manage our different business unit stakeholders. Every business unit had its own agenda and priorities; if they found some time they supported our CRM initiative. Sometimes, individual*

> *business units tried to stop our activities if we were not in-line with their expectations ... I felt, sometimes it was very hard to move forward, every single activity required negotiations between the three business units.'* (EMEA SBAP Project Manager CRM, 2005, [35])

> *'Every business unit and region established their own ways of managing Sun's customer relations. It was difficult to implement our CRM project across these heterogeneous environments.'* (EMEA SBAP Project Manager CRM, 2006, [32])

Therefore, these complexities raised initiative specific issues, such as growing resource demands, additional project administration, drifting initiative goals and objectives, and formal adjustments of the next steps among the different business unit silos and misaligned regions.

The second group of effects emerged from misaligned business operations. In particular, the de-fragmented methodologies, approaches and routines, based on different operating models, concepts and processes deriving from the organisational "silos", increased the complexities of the initiative. For example, PS was organised to engage with their customers on the basis of the AIM concept (Architect, Implement, and Manage). The AIM model was very much a collaborative engagement approach developed by PS to engage early with potential customers, while "Architect" was the solution for their customers' business problems. The next step for Sun would be to sell the solution and implement it for their customers, and in the last stage to "Manage" the solution for their customers. In comparison, SSO managed their customer relations mainly on the basis of an indirect and nationally localised partner network model. The SSO did not work particularly closely with their customers, nor did it deal with their business issues. Moreover, SSO mainly operated a local partner-network which allocated partner service companies to their customer's business issues. Instead, GSO operated through three different organisational models. Firstly,

Tier 1 customers, which make up less than 10% of the company's customer base and are responsible for more than 80% of the global revenues, received special attention through the global SEM organisation (Strategic Engagement Model). SEM was developed to manage the company's most important Key-Accounts through one SEM team for each individual Key-Account (e.g. UBS). Secondly, Tier 2 included local (county level) customers, which were responsible for over 60% of the revenue for a specific selling unit region or country. For those customers, the company nominated a local Key-Account Manager, following a standardised key account process. The rest of the local client potentials were called White Space Accounts (Tier 3): White Space Accounts included all customers from different industries with little or no revenues. These customers were managed indirectly by Sun's local partner networks. Nevertheless, the GSO account performance was measured by means of the GSO account scorecard. These various concepts were not aligned, and the individual executives and groups pushed for their integration into the strategic goals of the CRM Convergence initiative.

> *'We have too many concepts and structures. Our SEM model was not aligned with the CRM initiative. Our KAM organisation tried to integrate the SEM concept into the CRM scope. For example, PS implemented and follows the AIM framework. AIM and SEM are still not integrated. Our people work in different departments with different, structures, concepts and methodologies. Each department and business unit protect their structures and concepts'* (Global Key Account Manager & Solution Architect, 2005, [24])

These misaligned business operations affected the initiative's current resources and facilitated deviations in reaching the initiative's strategic goals (strategic goal deflections). Moreover, the different forces engendered transformations in the following initiative resource areas: form and administration, processes and routines, and roles and responsibilities (skills).

Table 23: The effects and their implications

| Initiative Activities | Effects | Implications |
|---|---|---|
| (16)<br>• Integrate and align different organisations (business units) with CRM goals and objectives | • Business unit integration (organisations) reduced initiative progress and efficiencies | • Different levels of knowledge and capabilities created different organisational perspectives on future CRM expectations<br>• Different levels of decision power were used to push organisational interests before CRM goals and objectives<br>• Initiative team member roles changed<br>• Initiative specific management processes changed<br>⇒ *Organisational alignments through the initiative created complexities within the different business units and created additional demand for resources and reduced initiative progress* |
| (17)<br>• Enhance existing business operations with CRM capabilities to become more customer oriented | • Consolidation of misaligned business operations created resistance against CRM and weakened existing operations | • Established approaches and routines were protected by various business units<br>• Detached approaches, methodologies, and processes were incompatible between each other<br>• Existing business operations and skills related to individual organisational procedures, processes and definitions<br>⇒ *Misaligned business operations reduced their overall efficiencies during the transformation and consolidation period, triggered by the CRM Convergence initiative activities.* |

### 6.3.1.2 Barriers arising from the existing Sales Capabilities

Sun's existing product-driven sales capabilities were protected by a large community within the firm, which increased the resistance against the transformation into a customer- and solution-oriented company. These groups had developed the company's past success through transaction-oriented sales capabilities, and found it difficult to accept and trust the changes and the intention to adopt a more solution-oriented sales approach.

> *'...our sales and account managers were really transaction orientated. They had a strong product and "box moving" mentality... our sales did not recognize what we tried to achieve with the CRM Convergence initiative ...'* (Strategic Key-Account Engagement Manager & CRM Representative, 2004, [6])

The shift from a product-oriented sales approach to a collaborative and more solution-oriented one created various barriers for the CRM Convergence initiative.

Firstly, besides the close relationship of the SBAP team with GSO, all of the CRM Convergence initiative team members had a strong GSO background. All of the team members, except for one person, had been recruited from the GSO organisation, and they had a strong GSO mindset and a great deal of knowledge about GSO processes, procedures, and concepts, such as the customer engagement processes or account management concepts. Hence, if the CRM Convergence team required support, or if staffing questions needed to be solved, the CRM Convergence team first recruited from GSO. Those teams were not open-minded nor prepared to initiate radical changes to build a customer-oriented company.

Secondly, the executive steering committee for the CRM Convergence initiative consisted mainly of GSO executives. Consequently, the SBAP office was highly GSO-oriented and managed in its form, structure, routines, and physical location. This GSO-oriented set-up created mistrust within the other business units and strengthened the GSO mindset within the different project teams. Hence, because of the dominance of the GSO, the CRM Convergence initiative's goals and objectives constantly changed and became increasingly GSO-oriented.

> *'In the beginning, CRM Convergence focused on SMI. Over time we reduced the scope and focused primarily on GSO. GSO financed the CRM initiative and various GSO managers expected that their interests would be addressed first. If we had some budget problems and we were forced to reduce the scope - we increased the GSO focus. '* (Program Manager CRM Convergence, 2006, [28])

However, as mentioned in previous sections, in comparison with the PS organisation, GSO lagged far behind in terms of customer orientation, solution selling, and

collaborative customer engagement capabilities. Therefore, various new concepts created complexities for the initiative, because the organisations supported the new CRM directions in different ways and to various extents within their individual commitments (GSO; SSO, and PS) to change. For example, GSO and SSO failed to act truly as a trusted business advisor for their customers. The wide range of sales people were engaged only in product sales and had a limited knowledge of their customers' business problems. Those people had experienced the company's past success in the e-business bubble by successfully selling computing equipment (products) in a fast growing market. Insecure and afraid of losing their decision making power and control, the sales people did not readily accept the CRM Convergence goals, but attempted to influence and change the initiative's new directions.

> *'Everything that our sales people want was to continue selling and selling products ... It was difficult to get their attention and support for our CRM initiative goals and plans '*(CRM Project Manager Switzerland, 2006, [49])

> *'Only two sales people of 65 invitations registered for our CRM trainings in Switzerland. The rest had some excuses or still didn't came to the sessions without any feedback to us ... in other regions we had the same reserved "euphoria"'* (CRM Project Manager Switzerland, 2006, [49])

In comparison, PS was already customer- and solution-oriented. The PS organisation strongly supported the shift in the expectation of increasing its influence and position within the global company. Nevertheless, GSO continuously controlled the progress and direction of the CRM Convergence initiative. The overall consequence was that the results became aligned with the GSO interests, and the initiative encountered

difficulties within the areas in which the project teams sought to initiate more radical changes that were in conflict with the GSO mindset and product orientation.

Table 24: The effects and their implications

| Initiative Activities | Effects | Implications |
|---|---|---|
| (18)<br>• Change product oriented sales capabilities into solution oriented sales capabilities | • Solution oriented sales concepts and project ideas were dominated from existing product oriented sales capabilities and slowed down the transformation process | • CRM Convergence project teams had GSO mindsets and backgrounds<br>• Existing sales and customer-facing teams had strong experience in product sales<br>• Existing routines, concepts and processes were build on product sales oriented capabilities<br>⇒ *Pre-selection and configuration of product-sales-minded project teams reduced the power to push radical change enhancements through the initiative* |
| (19)<br>• Involve Sun executives and establish commitments for new CRM directions | • Involvement of various sales executives within the CRM Convergence initiative created barriers against new directions | • GSO executives controlled the CRM Convergence progress by participating in the CRM Convergence initiative steering boards (decision influence)<br>• Various product-oriented sales executives and managers constantly undermined the initiative's activities and aims<br>• Various executives created difficulties for the initiative by distrusting and ignoring new concepts and approaches<br>⇒ *The involvement of product-oriented managers and executives reduced the options for the CRM Convergence initiative to establish new concepts and approaches* |
| (20)<br>• Strengthen new customer- and solution-oriented sales directions | • CRM Convergence initiative objectives and goals continuously drifted | • Involvement of de-fragmented business units impacted on the initiative's progress and created barriers for defined goals and objectives<br>• Mistrust of and resistance against defined goals and objectives stimulated the definition of new goals and objectives<br>⇒ *Initiative goals and objectives were impossible to maintain and follow within upcoming barriers and resistances* |

### 6.3.1.3 Retroactions from Organisational Transformations

Sun's organisation (SBAP department) of the strategic initiatives was not independent and isolated from organisational transformations within Sun. Instead, the changes brought about by the SBAP managed initiatives, like CRM Convergence, started to create retroactions in the SBAP group, and in the managed initiatives as well. These retroactions arose from the observed foregone organisational transformations of the CRM Convergence initiative.

In 2004, Sun started to implement its project for an integrated Sun Microsystems Inc. (SMI) by merging and consolidating the various organisations (PS, GSO, and SSO) together, mainly driven by the CRM Convergence initiative. These activities initiated changes within several areas of the organisation. Firstly, the initiative affected various business processes by establishing a consolidated customer view which integrated the various organisational planning processes into one business planning and account management process. Secondly, the initiative defined new roles and responsibilities within the new and re-engineered business operations by creating, for instance, the role of the new 'relationship manager'.

> *'...Today, our sales people have three main responsibilities; to generate leads, manage client troubleshooting and maintain our client relations. Today we have the RMO – Relationship Management Organisation, the former GSO.'* (Strategic Key-Account Engagement Manager & CRM Representative, 2005, [6])

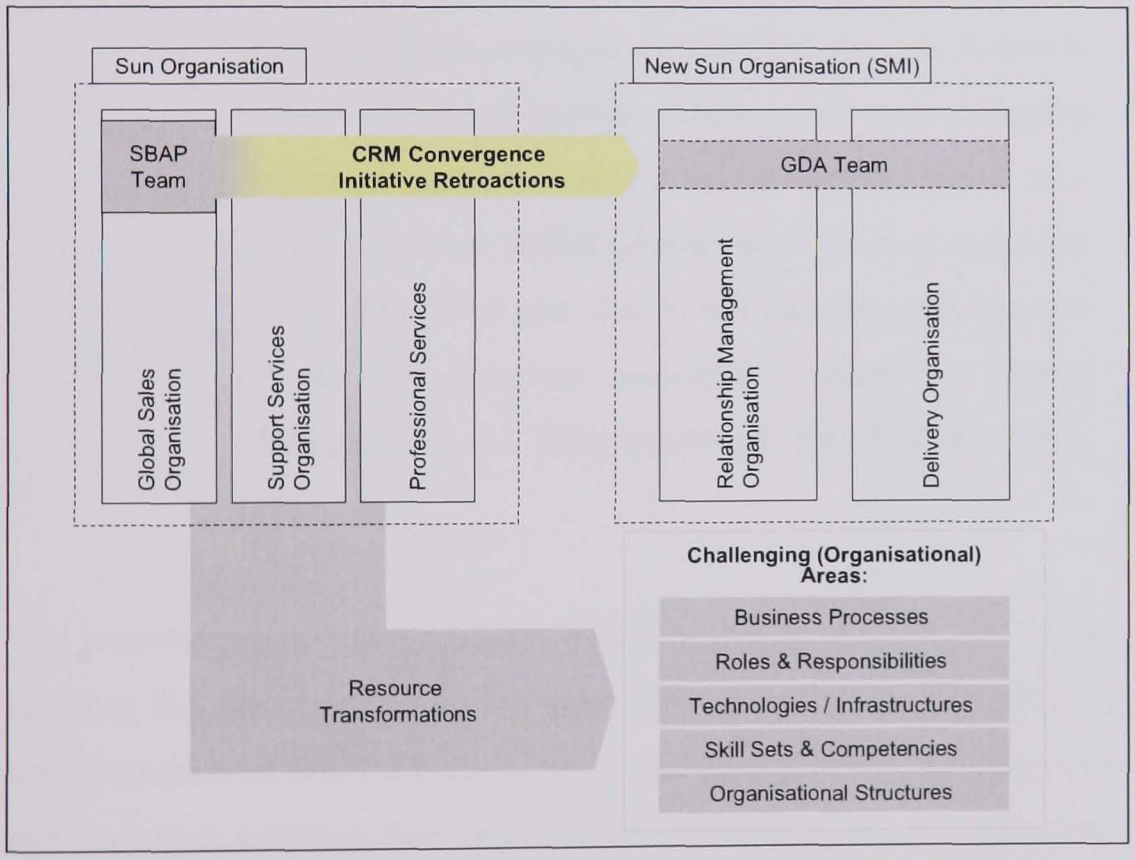
Thirdly, a new and unified technology changed the firm's technology set-up. The Siebel CRM system was integrated across the organisations and positioned as the new customer business platform. Fourthly, the CRM Convergence initiative launched a series of training and coaching sessions intended to mobilise the customer teams and support teams in developing new skill sets and business competencies. Fifthly, as already mentioned, the initiative stimulated and supported the organisation's transformation into a single Sun organisation (SMI).

> *'...the Convergence program was one of the key drivers to initiate the consolidation of PS, SSO, and GSO. During the downturn, people realised that they should put the customer at the centre of all necessary operations, supported by one organisation (SMI).'*

(Global Key Account Manager & Solution Architect, 2005, [24])

In 2005, the new Sun SMI organisation was completed and put in place, as illustrated in Figure 17. The organisation consisted only of two main business units; the Relationship Management Organisation (Former GSO) and the Delivery Organisation (Former PS and SSO). Furthermore, Figure 17 illustrates how the launched CRM Convergence initiative transformed different organisational resources with the aim of making Sun more customer oriented. During this process, new effects emerged, defined as retroactions, which ex post impacted the organisation and management (SBAP department) of the strategic initiatives as well.

Figure 17: Initiative related transformations and emerged retroactions.




Retroactions arose from the consolidation of Sun's de-fragmented and complex company structures through the CRM Convergence initiative. Those retroactions can best be explained through the transformation of the SBAP department to the new and more customer oriented GDA (Global Deployment and Adoption) team. As described in the previous chapters, the SBAP group was responsible for managing Sun's

strategic initiatives. Nevertheless, especially in the context of the CRM Convergence initiative, the SBAP group pushed transformations within Sun's organisation. Those transformational activities and dynamics created new actions (retroactions) which affected the SBAP organisation ex post, illustrated through the following three steps. Firstly, the SBAP department learned to become more customer oriented and the team was forced to reduce complexities within their own mission. The SBAP department expected that reducing the complexities would help sharpen their focus on their actual programme portfolio and heighten the effectiveness of their ongoing programme activities to increase the value for their "customers". In this relation, SBAP activities and business operations were not isolated from the organisational transformation dynamics of the CRM Convergence initiative.

> *'Our SBAP group was as well impacted by our initiatives. One consequence was that we were forced to reduce the complexities, align with our changing organisational environment and transform into a new group, which we called Global Deployment & Adoption group. The GDA aim was to increase the effectiveness of our key program execution.'* (Head of Global Strategic Change Programs/Head SBAP/GDA, 2005, [15])

The transformation of the SBAP department was one of the outcomes from the learning the department was experiencing during the CRM Convergence initiative transformation of Sun's organisational structures and business operations into the new and customer oriented Sun organisation. Secondly, the changes within the SBAP direction stimulated the endeavour to start simplifying SBAP-related processes and methodologies. Those changes transformed the SBAP department into a single organisational unit – the GDA Team - with the main focus on increasing the acceptance of their customers in the context of the ongoing strategic initiatives and planned programmes.

> *'Our group [SBAP] was affected by our own programs [CRM Convergence initiative] to make the organisation more customer oriented. The CRM programme increased Sun's customer focus and challenged our group in the same time to be more customer oriented for our internal customers'* (Program Manager CRM Convergence, 2006, [28])

Thirdly, the new GDA Team centralised the management of strategic initiative operations and initiative resource allocation. The aim was to increase the effectiveness with which the firm's strategic needs were addressed by improving the environment of the strategic initiative operations. Those centralisations changed how initiatives were rolled out and allocated and re-allocated the requisite resources. As in the past, initiatives were rolled out in two steps. Firstly, the roll-out was conducted within a selected time zone (mostly EMEA); it was then extended globally, after successful completion of the first step. This approach changed as the GDA team acted globally and started to centralise the structure and approaches of various ongoing initiatives.

Table 25: The effects and their implications

| **Initiative Activities** | **Effects** | **Implications** |
|---|---|---|
| (21)<br>• Improve structures through org. transformation according to the CRM Convergence objectives and goals | • Org. transformation created additional changes within the CRM Convergence initiative through retroactions | • SBAP group was impacted by org. transformations and changed into GDA team<br>• The new GDA team changed how they managed their initiatives as the CRM Convergence initiative<br>• The CRM Convergence geographical scope changed into a more global one<br>• Changes in the geographical scope created CRM Convergence-related re-planning activities impacted on resource demand, timelines and results<br>⇒ *The CRM Convergence-related foregone organisational transformations created retroactions on the initiative which created additional complexities* |

### 6.3.2 Interactions between Strategic Initiatives

Interactions between the CRM Convergence initiative and other ongoing strategic initiatives produced challenging situations for Sun during different initiative related transformation activities. These challenging situations can be summarised as *conflicting perspectives and focuses between initiatives*, *challenging dependencies between initiative goals and objectives*, and *challenging boundaries and barriers from ongoing initiatives*. They gave rise to complex effects for Sun. Furthermore; three different drivers (similar to the drivers in relation to Sun's organisational context) were identified as key means to facilitate the three different challenges in the context of the CRM Convergence initiative. Firstly, initiative-individual priorities and agendas led to specific activities, with the outcome of challenges for other ongoing strategic initiatives. Secondly, decision structures and priorities on initiative related resource allocations sometimes produced unexpected outcomes and effects within other ongoing initiatives. Thirdly, the existing sales capabilities (product orientation) created challenges from which various effects within the CRM Convergence initiative and other ongoing initiative arose.

Figure 18: Context of interactions of the CRM Convergence initiative.

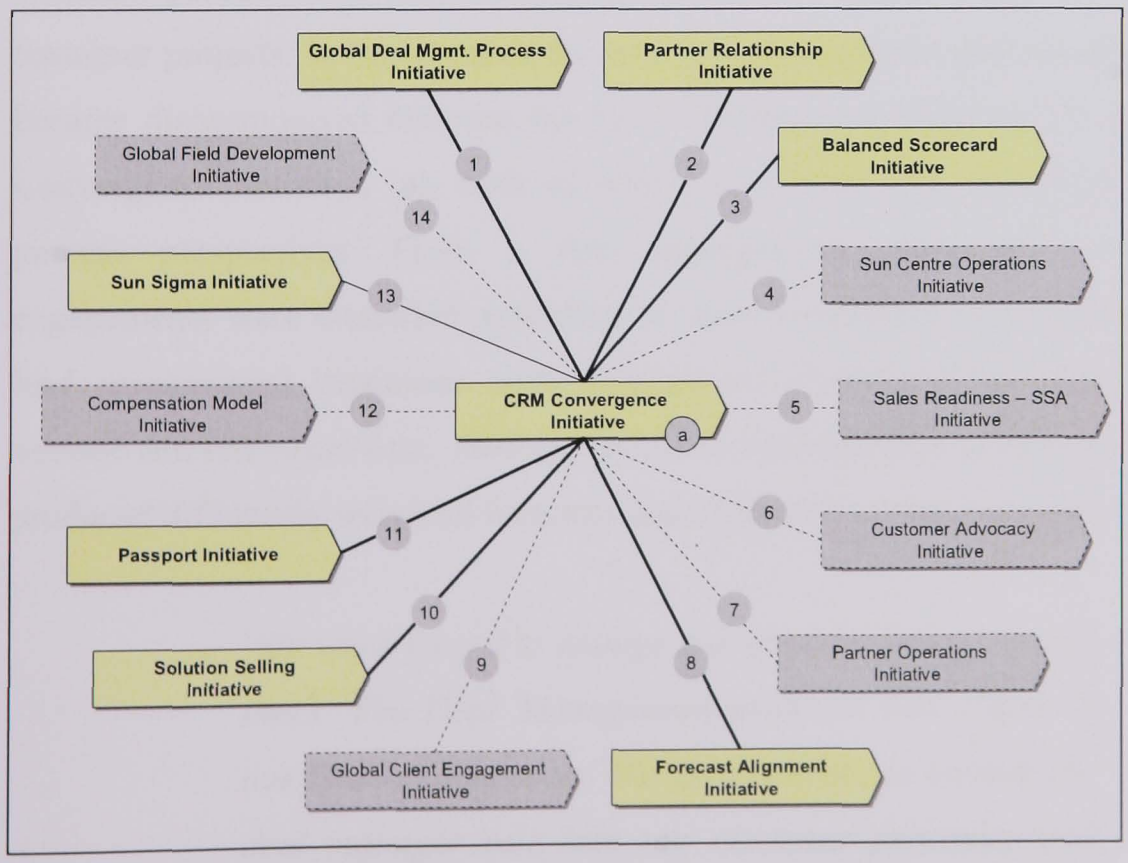


Figure 18 illustrates the effects observed based on the interactions among different strategic initiatives. These examples are related to the CRM Convergence initiative and classified alongside the various challenges described in detail in the following sections.

### 6.3.2.1 Conflicting Perspectives and Focuses between Initiatives

The CRM Convergence initiative team produced certain results which conflicted with other initiative objectives and business perspectives and the stakeholders expectations involved in those initiatives. These conflicting perspectives and controversial focuses created the challenging outcomes (effects) described through the following two examples.

The first example illustrates conflicting perspectives between the CRM Convergence initiative and the Deal Management Process initiative. Both initiatives developed new lead management processes (inefficient overlapping and resource spending), with the consequence that the CRM Convergence initiative was forced in the end to adopt new processes and the relative new roles from the Deal Management Process initiative. The global Deal Management Process initiative (1) tried to establish a unified customer process with which to engage and sell complex, risky, and multi-country customer projects. In this context, the new lead management process design activities became disharmonised between the Deal Management initiative (1) and the CRM Convergence initiative (a), both of which developed their own lead management process perspectives. From a deal management perspective, new customer engagements were classified according to their complexity risks. Instead, the CRM lead management processes were targeted on identifying the potential business volume and sales-lead time. Both perspectives used different qualification criteria and produced differently weighted forecasts and necessary actions to be taken.

> *'We were forced to change our process design several times. The Deal Management program was closer to our finance executives. We get the order to include the deal manager role into our customer processes and*

*their risk measures to qualify the lead pipeline.'*
(Program Manager CRM Convergence, 2006, [28])

This example illustrates how the Deal Management programme interacted with the CRM Convergence initiative through its higher-valued authority to achieve the strategic goal of establishing one unified and integrated deal management process. The authority to change the CRM Convergence process design focus was supported by the company's financial executives, who had strong decision power and influence, especially in those challenging company times. The outcome was that the CRM initiative-oriented lead management process changed, and new roles and responsibilities were added to the already designed process, with additional risk measures to qualify customer potentials. The example illustrates how an initiative interacted with another initiative of Sun, with the consequence of creating additional complexities and inefficiencies overlapping in project tasks and resource allocations.

The second example illustrates how different perspectives on strategic improvement areas between the Sun Sigma initiative and the CRM Convergence initiative created inefficient overlaps between the initiatives and created an inefficient convergence of both initiatives. Through the CRM Convergence initiative, various selling units, including several regional executives and managing directors, increased their attention to customer satisfaction and started to re-schedule their priorities and current business issues.

*'Through the CRM Convergence initiative, several selling units [subsidiaries] increased their attention on customer satisfaction and customer orientation. They used Sun Sigma to start new projects to improve the utilization of their customer assets.'* (Program Manager CRM Convergence, 2006, [28])

The Sun Sigma initiative originally planned to roll out a set of process improvement methodologies and guidelines. In this context, the Sun Sigma-oriented perspective

aimed to improve Sun's back-office operations which were somehow in conflict with the CRM Convergence perspective of putting the customer at the centre of all business operations. The consequence was a convergence between the Sun Sigma initiative perspectives and focus and those of the CRM Convergence initiative. The CRM Convergence perspective induced Sun Sigma to become increasingly "customer-oriented". Therefore more and more Sun Sigma-oriented customer improvement projects were launched, in addition to the ongoing CRM Convergence initiatives. Furthermore, management teams started increasingly to invest their attention and scarce resources to support both initiatives; the CRM Convergence initiative and the Sun Sigma initiative with somehow strange and unproductive outcomes, as outlined in the following example.

> *'I was leading the intention to merge our new CRM methodology with the Sun Sigma methodology. We had a lot of workshops and sessions to get one CRM/Sun Sigma methodology – I don't know for what we did this.'* (Senior Program Manager CRM Projects, 2006, [20])

The result of the harmonisation dynamics between the CRM Convergence initiative and Sun Sigma perspective was that the CRM Convergence programme interacted with the Sun Sigma initiative in regard to its scope (sales and engagement processes), plans (business priorities and justifications) and content (methodologies and tools). Furthermore, at the same time the CRM Convergence initiative adopted some of the Sun Sigma specific concepts and approaches and got closer to Sun Sigma within three areas. Firstly, the Sigma initiative rolled out a wide range of new methodologies and tools, and the CRM Convergence programme was forced to use these new methodologies and tools to "improve" existing approaches and project activities. On the other hand, various Sun Sigma executives and management sponsors thought that use of these new methodologies and tools in other initiatives would help establish Sun Sigma across the organisation. Secondly, CRM Convergence team members were invited to undertake mandatory Sun Sigma training and certification. Every project

around the globe was urged to send candidates for the Sun Sigma training sessions, with the consequence that the focus was more on Sun Sigma training than on solving actual CRM Convergence problems. Thirdly, the new CRM Convergence customer tools and processes became increasingly Sun Sigma oriented, with additional routines, administrational and communicational processes. The CRM Convergence programme started to change its templates and documentations in order to be Sun Sigma compliant. Moreover, additional organisational customer advocacy units and roles emerged across the organisation and created administrative overheads.

The outcome of this harmonisation of initiative perspectives was that inefficient overlaps arose between the CRM Convergence and Sun Sigma initiatives within the areas of resource allocations, business priorities, and results. Furthermore, those complexities hampered progress towards the original goals of the Sun Sigma initiative and created misunderstandings (e.g. additional stimulations on misinterpretations on ROSS). Both examples illustrate how different perspectives on two strategic initiatives created inefficiencies and additional complexities. The consequence of these inefficiencies and complexities was that some of the initiative's original plans and aims slowed down because of the convergences between the two initiatives.

Table 26: The effects and their implications

| Initiative Activities | Effects | Implications |
|---|---|---|
| (22)<br>• Establish new organisational procedures, processes and roles | • Collisions and conflicts emerged from new and overlapping processes and roles | • New processes, procedures and new/necessary roles were designed by different strategic initiatives<br>• Some of the processes designed per initiative included some overlapping with different business configurations<br>⇒ *The CRM Convergence initiative created complexities as overlaps with other initiatives within the area of similar processes and roles, with the result of inefficient resource allocations/growing resource needs per initiative* |
| (23)<br>• Follow and establish the defined business perspective and vision per initiative (customer orientation. | • Different business perspectives of individual initiatives facilitated conflicting results and created inefficient convergences of | • The Sun Sigma initiative aimed to improve the company's back office operations and establish process excellence standards across the company<br>• The CRM Convergence initiative aimed to transform Sun's business operations into a customer oriented company<br>• The Sun Sigma initiative get closer to some of the CRM Convergence initiative aims and hampered progress towards the original goals |

| | | |
|---|---|---|
| process excellence etc.) | different initiatives | ⇒ *The CRM Convergence forced the convergence between the CRM Convergence initiative and the Sun Sigma initiative with the result of additional complexities and inefficiencies within the Sun Sigma initiative* |
| (24)<br>• Following and executing initiative related project tasks and methodologies | • The convergence of the Sun Sigma initiative with the CRM Convergence initiative created confusions and increased unproductive outcomes | • The Sun Sigma initiative pushed and merged established Sun Sigma methodologies (like ROSS) with the CRM methodologies. Those activities absorbed scare company resources with no clear / valuable results<br>• The CRM Convergence initiative induced the Sun Sigma initiative to become more customer-oriented, with the consequence of changes within existing Sun Sigma initiative related activities and methodologies<br>⇒ *The convergence of the Sun Sigma and CRM Convergence initiatives changed some of the applications of the Sun Sigma- and CRM related methodologies and reduced their specific effectiveness and increased misunderstandings and unproductive outcomes* |

### 6.3.2.2 Challenging Dependencies between Initiative Goals and Objectives

Different dependencies between the CRM Convergence initiative and other strategic initiative goals and objectives emerged, and they had challenging effects with various outcomes. In the context of the CRM Convergence initiative, those challenges can be illustrated by the following two examples.

The first example describes the dependencies between the CRM Convergence and BSC initiatives. The CRM Convergence programme grew in size and investments, so that it increased in authority and legitimacy and "received" higher priority to implement the CRM Convergence initiative's goals and objectives from Sun's management teams.

> *'CRM Convergence required a lot of resources; it was one of the larger-scaled programmes. They always had a higher priority to get additional resources and support. Because our EMEA executives were challenged to roll-out the CRM Convergence programme in the same year when we started the BSC*

> *initiative.'* (EMEA Operations Manager & BSC Initiative Core Team Member, 2005, [29])

This evolution created dependencies with the BSC initiative goals and objectives. The CRM Convergence programme absorbed management attention and "slowed down" other activities like those of the BSC initiative, which was hampered in fulfilling its goals and objectives because the BSC initiative did not receive all the necessary programme resources (involved in the CRM activities).

> *'... indeed, our CRM activities and project efforts required more and more resources...* '(Program Manager – CRM Convergence Program, 2006, [28])

This example illustrates how the progress of CRM Convergence initiative goals and objectives hampered the progress of the BSC initiative by absorbing relevant resources and management attention.

The second example illustrates the evolving dependencies between the CRM Convergence and Passport initiative. In detail, Passport forced CRM Convergence to reprioritise some of its goals and objectives so as to fulfil some of the Passport-related requirements. Both initiatives followed their plans and timelines to fulfil specific goals and objectives. The Passport initiative started to develop and consolidate an international approval process and a tool-set for Sun. The aim was that the sales teams should be able to minimize their approvals and engage early with customers.

Every country or selling region had its own and different processes and tools. For example, Germany developed a Database-oriented engagement tool, whilst Spain used various sheets and templates supporting only the specific process and blockbuster products for the region. In comparison, the CRM initiative sought to establish one consolidated view and offering process to their customers supported by one central platform – the new Siebel platform. The Passport programme's goals and

objectives came into conflict with the CRM Convergence initiative with its proprietary tools and stored information and increased the latter's scope.

> *'One of Helmut's [German Senior Executive and VP] goals was to successfully roll-out the global passport processes and tools. He already promised different sales teams to deliver the program benefits. We briefly explained to him the pros and cons and that we would not be able to deliver the passport process and tools without the CRM customer data exchange interface. He decided that the CRM team needed to develop the required customer data exchange interface. You know Germany and UK still deliver over 50% of the overall EMEA revenue goals.'* (Senior Project Manager, Global Programs – Passport Program, 2004, [4])

In this relation, the programme manager was temporarily responsible of the passport initiative as part of an internal task force. The task force aimed to establish the new passport approach in Germany and the UK as part of an internal revitalisation plan. The overall passport programme progress slowed down, based on higher priorities of larger scaled programs such as the CRM Convergence initiative and required to be revitalised again. Short decision paths and strong involvement of decision makers was one of the key characteristics of the temporarily nominated passport initiative task force. Later, the task force leader and temporary passport programme manager became strongly involved in the BSC initiative as part of the BSC core team.

Nevertheless, the example illustrates how larger scale programs like the CRM Convergence initiative forced to allocate more resources, and to develop the CRM customer data exchange interface for the Passport system. In summary, this example illustrates how the Passport initiative affected the scope, timelines/plans, and resources of the CRM Convergence programme, which was given higher priority than Passport. Nevertheless, by utilising existing management objectives, the Passport

initiative "overruled" the higher priority goals and objectives of the CRM Convergence programme and engendered change in it.

Table 27: The effects and their implications

| Initiative Activities | Effects | Implications |
|---|---|---|
| (25)<br>• The CRM Convergence initiative increased the roll-out scope across the firm | • Additional resource needs for the CRM Convergence initiative created additional resource gaps within other initiatives | • CRM Convergence initiative increased their roll-out scope, with the consequence of growing resource needs<br>• The CRM Convergence initiative increased in size and required more investments<br>• Other initiatives like the BSC initiative slowed down as necessary resources were needed and absorbed within the CRM Convergence initiative<br>⇒ *The need for additional CRM Convergence resource needs hampered progress towards the goals and objectives of other initiatives like the BSC initiative* |
| (26)<br>• The CRM Convergence initiative increased the management's attention to the CRM topics | • Increasing management attention to the CRM Convergence initiative reduced priorities for other initiatives like the BSC initiative | • Additional CRM Convergence resource needs increased management attention<br>• CRM Convergence initiative absorbed and reduced Sun's management attention to the BSC initiative and reduced the decision process for the BSC initiative<br>⇒ *Increasing management attention to the CRM Convergence initiative slowed down decision processes and priorities for other initiatives like the BSC initiative* |
| (27)<br>• The Passport initiative established consolidated Passport processes across all regions | • Additional tasks and work emerged for the CRM Convergence initiative to fulfil Passport initiative requirements | • The Passport initiative forced the decision to overrule the CRM Convergence initiative priorities and program priorities<br>• The Passport initiative required additional support from the CRM Convergence initiative<br>• The CRM Convergence initiative was forced to deliver additional results based on Passport initiative requirements<br>⇒ *Passport initiative requirements increased the CRM Convergence initiative objectives and challenged actual plans and timelines, based on the new Passport related goals* |

### 6.3.2.3 Challenging Boundaries and Barriers between ongoing Initiatives

The CRM Convergence initiative encountered various challenging constraints and barriers raised by ongoing initiatives. These barriers generated critical effects for the CRM Convergence initiative and other ongoing initiatives, which are described in detail in the following.

> *'I think we are trying too much ... too many initiatives, programmes and buzzwords ... We need to increase our overall company focus.'* (Program Manager CRM Convergence Program, 2006, [28])

> *' ...We need a "Chief Complexity Officer" in our company...'* (Head of Global Strategic Change Programs/Head SBAP/GDA, 2005, [15])

Sun employees and stakeholders involved in various initiatives felt that they had become inefficient, and that it was difficult to follow all the ongoing initiatives. Each initiative developed its own vision and established its individual acronyms, expressions, concepts and approaches across the company. Those individual and initiative-specific activities sometimes created boundaries and barriers for other initiatives, as illustrated by the following two examples.

The first example is provided by different challenges for the CRM Convergence and relate to three different initiatives; the Partner Relationship (PR) initiative, Solution Selling (SoS) initiative and the BSC initiative. All three initiatives were launched by Sun to address specific strategic issues. The PR initiative aimed to strengthen Sun's technology and product integration partners (like Accenture, BearingPoint, EDS etc.) to protect and utilize the companies' global customer bases. The SoS initiative started to develop and shape customer solutions, based on Sun's existing products and services, including the integration of additional products and services from third parties. The target was to offer competitive customer solutions such as banking solutions, supply chain management solutions etc and the BSC initiative aimed to improve and align Sun's customer oriented success metrics with overall company strategies. In this constellation, different challenges emerged and created barriers and boundaries between the ongoing initiatives. Firstly, the PR initiative was focused on integrating the firm's business partners into Sun's engagement and customer project acquisition and delivery processes. In this context, Sun was more recognized by their integration partners as a product vendor who offered the products necessary to build

the solution. Hence, the PR initiative was defining and conceptualizing product oriented business processes around their partners which were in conflict with the CRM Convergence initiative to put the customer into the centre of all business operations.

> *'We spend immense time discussing who is our customer and who is necessary to fulfil our customer wishes and orders ... we had problems to find a solution for both initiatives* [Partner Relation initiative and CRM Convergence initiative] ... *we faced ongoing difficulties and we spent too much project time to clarify controversial results between our CRM and Partner initiatives ...* ' (Program Manager CRM Convergence Program, 2006, [28])

In the perspective of the PR initiative the solutions were built by Sun's partners and not by Sun which was in conflict with the SoS initiative to shape customer solutions. Those activities created barriers and boundaries for the CRM Convergence initiative to manage Sun's new solution offerings through more customer oriented business processes and operations. Furthermore, every initiative created their own perspectives and sometimes controversial measures (sold products to partners vs. sold Sun solutions) of customer success which was furthermore challenging for the BSC initiative to consolidate all of them. Measuring the business strategy reflected more a top-down approach than the bottom-up consolidation of business performance measures and goals. In summary, this example illustrates how the CRM Convergence initiative faced and created different barriers and boundaries in the context of ongoing initiatives, which stretched scarce initiative resources and sometimes created delays in expected results.

The second example illustrates how the CRM Convergence initiative faced emerging constraints and barriers raised by the Forecast Alignment initiative. The Forecast Alignment initiative aimed to improve and consolidate Sun's different forecasting

processes and concepts. In the past, every selling unit and region had had its own way of forecasting business and estimating the opportunities for Sun. This situation created challenges for the entire company as the management teams did not receive the consolidated forecast figures necessary to plan accurately. Furthermore, forecast accuracy was nearly impossible, because unified forecast standards and methods were not established, which in addition increased the risk that the firm would be unable to scale the production plants accurately. To overcome those challenges the Forecast Alignment initiative was launched with a strong focus on consolidating Sun's different forecasting processes and concepts. At that time, Sun's product revenues covered over 80% of the company's revenue mix. Hence the Forecast Alignment project team focused its activities more and more around product-oriented forecast processes and estimations as the new product-life-cycle concept. The concept should have helped sales teams to become more proactive in the future by identifying "out-of-day products" and offering their customers the latest product upgrades. This concept was announced by the Forecast Alignment initiative as a "quick win", and it rapidly gained recognition from the sales teams. Nevertheless, the concept supported Sun's product-oriented mindset and neglected the company's latest efforts to transform current sales capabilities into solution-oriented sales capabilities. Sales people started to reduce their support for the CRM Convergence initiative and increased their resistance against the solution-oriented process changes.

> *'It was a little bit frustrating, we trained and evangelised our sales people to sell more solutions and the Forecast project team enforced their product mind sets.'* (EMEA SBAP Project Manager CRM, 2006, [33])

Sales people received support from the Forecast Alignment initiative for their existing product orientation, with the consequence that the CRM Convergence initiative increasingly encountered resistance against new solution-oriented approaches.

*'The life cycle concept from our Partner Relation program created additional difficulties to convince our Sales people to sell solutions instead of single products'*
(EMEA SBAP Project Manager CRM, 2005, [37])

The statement illustrates that sales people started to adopt the Forecast Alignment initiative processes and concepts, which created boundaries and barriers for CRM Convergence. Firstly, new concepts like the product life cycle strengthened the arguments of some of the sales people to continue focusing on product sales and increased their resistance towards selling solutions for their customers. Secondly, similar CRM-related concepts became more difficult for the sales teams to accept. Sales teams were only able to reserve a predefined amount of days for training and self studies per year. Furthermore, previously rolled-out training sessions like the new forecast process occupied the training days of the sales teams, which made it difficult to fill classes and gain the attention of the sales teams for additional training sessions, like the new solution-oriented ones in the context of the CRM Convergence initiative.

Table 28: The effects and their implications

| **Initiative Activities** | **Effects** | **Implications** |
|---|---|---|
| (28)<br>• The CRM Convergence: initiative rolled out new customer processes, roles/ responsibilities and customer measures | • Controversial initiative directions and results created challenging barriers and boundaries for the CRM Convergence initiative to deliver the expected results in time and on budget, for the involved initiatives | • The CRM Convergence initiative changed/enhanced existing customer processes, new roles and responsibilities (e.g. engagement manager, solution managers etc.)<br>• The Partner Relation initiative pushed product oriented relationship management business processes and operations<br>• The Solution Selling initiative aimed to create new customer solutions – controversial to the Partner Relation initiative plans<br>• Ongoing initiatives as the Partner Relation initiative, the Solution Selling initiative followed controversial directions which created barriers for the CRM Convergence initiative and the involved initiatives<br>• The CRM Convergence initiative faced those controversial initiative directions, which absorbed scarce CRM Convergence initiative resources and delayed results<br>⇒ *Controversial initiative results emerged from ongoing initiatives as the Partner Relation initiative, Solution Selling initiative and the BSC initiative and created barriers and boundaries for the CRM Convergence initiative*<br>⇒ |

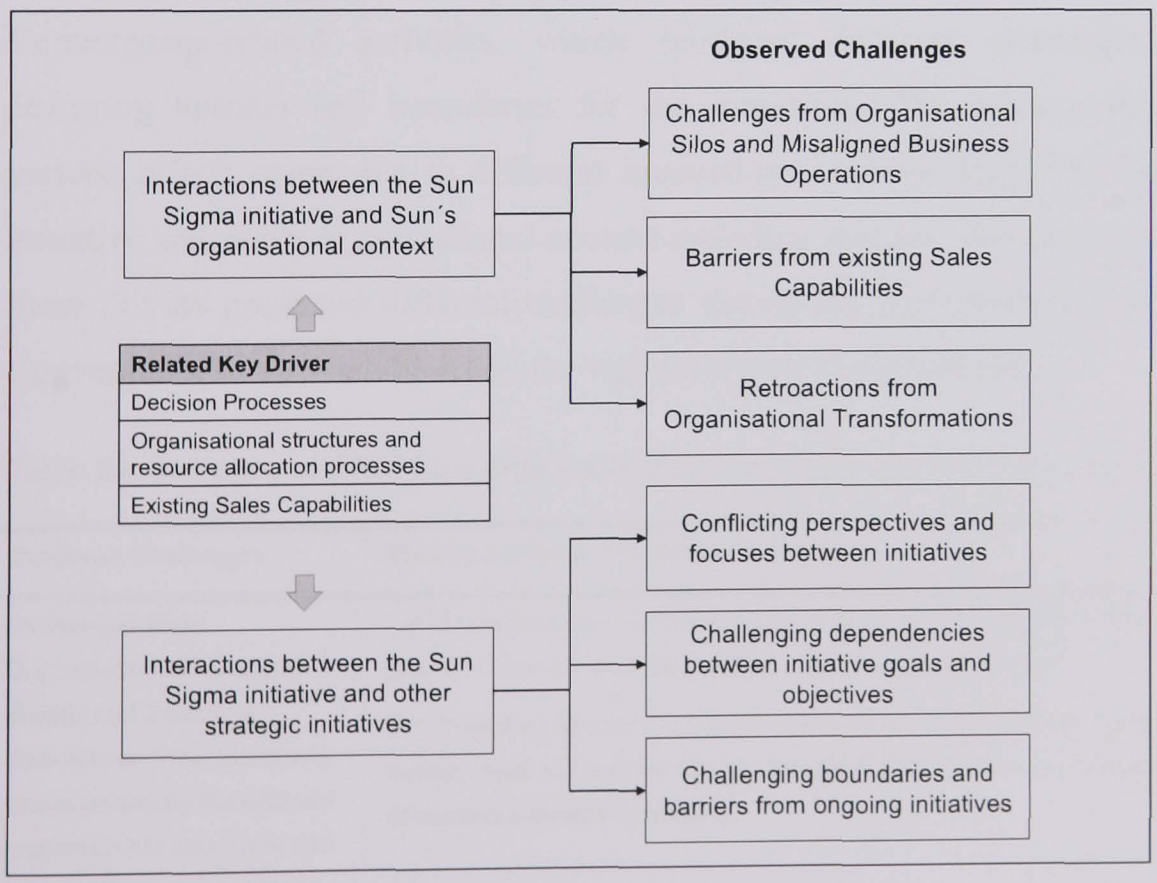
| | | |
|---|---|---|
| (29)<br>• Enhance the knowledge of the existing sales force with CRM Convergence initiative related improvements | • Standardised training strengthened boundaries and barriers for the BSC initiative | • Development of standardised CRM related training programs for Sun's global sales force<br>• Coaching and training sessions were rolled out globally to enhance the existing knowledge of the sales force with new CRM concepts and approaches<br>⇒ *New CRM trainings facilitated the adoption of new key measures and customer performance perspectives, which increased the difficulties for the BSC initiative to consolidate and changed them across the organisation in a later stage* |
| (30)<br>• Successful roll-out of a consolidated and standardised forecasting concept and process | • "Quick Wins" of product-dominated sales concepts raised boundaries and additional barriers for the CRM Convergence initiative in establishing solution-oriented sales capabilities | • The Forecast Alignment initiative simplified Sun's different forecasting concepts and processes into one consolidated forecast approach<br>• The new forecast approach included product-oriented concepts like the product-life-cycle management approach<br>• The new forecasting approach was product-oriented and supported existing sales capabilities and mindsets<br>• The product-oriented forecast approach heightened resistance within the sales force to change in existing sales capabilities<br>• Limited training days of sales people were occupied by the new forecasting process training, which strengthened product oriented sales approaches and reduced the possibility to fill additional training courses with new solution-oriented sales concepts<br>⇒ *The Forecast Alignment initiative created Quick Wins by supporting existing sales capabilities and created at the same time barriers against establishing solution-oriented sales capabilities* |

## 6.4 Summary

The CRM Convergence initiative case study has observed the challenges and effects that arose during implementation of the CRM Convergence goals and objectives. These challenges and effects arose from two types of interactions: firstly, interactions between the CRM Convergence initiative and Sun's organizational context; secondly, between strategic initiatives, facilitating different challenges from which various effects evolved.

Different challenges emerged during the CRM Convergence initiative implementation. Those challenges formed a group of evolved effects based on interaction between the CRM Convergence initiative and Sun's organisational context or interactions between strategic initiatives. Moreover, those challenges were stimulated by the various initiative related drivers now explained.

Figure 19: Related key driver and observed challenges, in relation to the CRM Convergence initiative.



The Figure 19 illustrates the CRM Convergence related key drivers which stimulated the six different challenges that emerged from the two types of interactions. In this regard the first driver related to the company's existing *decision processes*. All business units maintained and supported their individual agendas and priorities and individual initiatives supported their agendas and priorities, which generated CRM Convergence-related challenges from which various challenging effects arose due to interactions with Sun's organizational context and interactions with other strategic initiatives. The second driver related to Sun's *organizational structures and related resource allocation processes*. Interactions between the organizational context and the strategic initiative as unbalanced decision power among individual business units led to different challenges and produced challenging effects. Furthermore, in the context of interactions between strategic initiatives, existing organizational structures and decisions gave rise to initiative-specific decisions on resource allocations which sometimes led to unexpected outcomes and effects within strategic initiatives. The third driver stimulated challenges during the CRM Convergence initiative implementations and related to the company's *existing sales capabilities*. Existing product-oriented sales capabilities challenged the transformation of CRM Convergence-related activities, which produced different challenges, such as emerging barriers and boundaries for the initiatives. The consequence was that various effects arose due to different interactions between the CRM Convergence initiative and Sun's organizational context and other strategic initiatives. In summary, these drivers produced different challenges during the implementation of the CRM Convergence initiative which had the various effects described above.

Table 29: Summary of CRM Convergence related challenges and emerged effects.

| Observed Challenges | Emerged Effects (Observed Examples) |
|---|---|
| **Challenges from Organisational Silos and Misaligned Business Operations:** This situation is characterised by the different organisational structures and related misaligned business operations with other units. | (16) Transformation of organizational structures increased the demand for new project resources and reduced the overall initiative's progress.<br>(17) Transformation of misaligned business operations created resistance and barriers against the CRM Convergence initiative activities and reduced the efficiency of existing business operations. |

| | |
|---|---|
| **Barriers from existing Sales Capabilities**: This situation illustrates emerging barriers and resistance against the transformation of existing sales capabilities. | (18) Solution oriented sales concepts and project ideas were dominated by existing product-oriented sales capabilities and slowed down the transformation of the CRM Convergence initiative.<br>(19) The involvement of various sales executives reduced the chances and options for the CRM Convergence team to establish new concepts and approaches.<br>(20) CRM Convergence-related goals and objectives became difficult to maintain and drifted continuously |
| **Retroactions from Organisational Trans-formations:** This situation illustrates how the trans-formation of organisational structures and initiative actions stimulated new changes within the same initiative (retroactions). | (21) The transformation of Sun's organisational structures created additional changes within the CRM Convergence initiative and additional complexities for the initiative, based on foregone initiative related organisational transformation activities. |
| **Conflicting perspectives and focuses between initiatives:** this situation is defined through different perspectives and focuses of ongoing initiatives which may collide and create conflicts between each other. | (22) Collisions created complexities for initiatives overlapping with other initiatives within the area of similar process designs and efforts to establish similar roles. Those similarities led to new conflicts and inefficiencies.<br>(23) Different business perspectives of individual initiatives produced conflicting results and created inefficient convergences between initiatives.<br>(24) The convergence of the Sun Sigma and CRM Convergence initiatives created confusions and misunderstandings between various stakeholders and produced sometimes unproductive outcomes. |
| **Challenging dependencies between initiative goals and objectives**: this situation defines the situation where two strategic initiatives engaged in dependencies between initiative individual goals and objectives with the consequence of evolving challenges. | (25) Additional resource needs for the CRM Convergence initiative created additional resource gaps within other initiatives.<br>(26) Increasing management attention to the CRM Convergence initiative reduced priorities for other initiatives as the BSC initiative.<br>(27) Emerging requirements by another initiative increased the CRM Convergence initiative objectives and challenged actual plans and timelines, based on the other initiative related goals. |
| **Challenging boundaries and barriers from ongoing initiatives**: this situation illustrates how an initiative encounters new barriers and boundaries created by other initiatives. | (28) Controversial initiative directions and initiative specific results as the partner/product relationship orientation, difficulties in defining Sun's customers, related customer success metrics and an overall CRM approach created boundaries and barriers for the CRM Convergence initiative to deliver on time and in budget.<br>(29) New CRM trainings facilitated the adoption of new key measures and customer performance perspectives, which increased the difficulties for the BSC initiative to consolidate and change them at a later stage.<br>(30) Results from other strategic initiatives created new resistance and barriers against fulfillment of the CRM Convergence goals. |

In 2007, Sun's organisation is different from what it was in 2000. During the CRM Convergence initiative roll-out period of 2001 and 2004, various company resources changed, notably the organisational structures, processes/routines, knowledge, capabilities and technologies. Until 2005, the company dealt more openly with solution-oriented offerings, customer, and market approaches. However, the company still comprises a strong product-oriented community and mindset. Nevertheless, the CRM Convergence programme required far more resources and investments than initially expected. All challenges and effects in the table reference the CRM Convergence initiative and related interactions between Sun's organizational context and other strategic initiatives. Overall and with hindsight, the CRM Convergence initiative case study illustrates that, besides the expected results, it gave rise to various challenging effects, complexities and related dynamics.

# 7 The Balanced Scorecard Initiative Case Study

## 7.1 Introduction

Decreasing markets and stagnating customer revenues and margins challenged Sun to achieve, and especially improve, progress in implementing the firm's strategy. In this regard, Sun's top management decided to improve the company's strategy execution process by launching the BSC initiative. The purpose of the new programme was to enhance Sun's existing management system and capabilities through a balanced scorecard-oriented management approach. Sun executives expected the BSC initiative to enhance the company's current management processes and strengthen Sun's overall strategy execution performance.

As a result of a global executive workshop case study, Sun's management team realized the advantages of an integrated framework for describing strategy by means of performance measures linked in four, balanced perspectives: financial, customer, internal process, and employee learning and growth. In this regard, the balanced scorecard increased its interest for Sun's global executives as a measurement system, a strategic management system, and a communication tool. The BSC approach is based on the best practices to operationalise a firm's strategies developed by Kaplan and Norton (1993).

Improving the overall strategy execution and decision making process through more factual based approaches became a critical task for Sun because the firm was unable to follow every ongoing trend. Furthermore, the BSC initiative aimed at determining how many strategic initiatives would be appropriate to execute and implement Sun's new business strategies, based on existing company resources. Moreover, it became essential for the company to be more selective in where it should invest its time, resources, and energy to achieve and sustain long-term competitive advantage and profitable growth.

The following in-depth case study discusses how the BSC initiative was implemented and how challenges and different kinds of effects emerged. The first section describes the BSC initiative, its particular characteristics and goals, and how the company launched the initiative. The next sections then illustrate how the BSC initiative was implemented and what kind of interactions between the BSC initiative and Sun's organisational context and other ongoing initiatives emerged. In particular, the sections discuss effects of various interactions on the organisation and other initiatives in the context of the BSC initiative. Those effects and results had different consequences which are discussed in the light of various examples. The last section illustrates and summarises the overall findings of the BSC initiative case study.

## 7.2 Rationale of the BSC Initiative

During a period of implementing different changes and company improvements, Sun's executives decided to enhance the company's strategy execution processes and launched a strategic initiative – the balanced scorecard (BSC) initiative. The initiative was begun during a spring leadership conference held in Tokyo in 2002, where the global executive management team organised break-out sessions to work on strategic topics. In this context, the Tokyo leadership was organised to outline and discuss how to enhance Sun's existing planning and business monitoring capabilities. The company's growth rates had started to decline, market conditions were changing, and the management teams were called upon to measure the new business and strategy performance. Furthermore, the executive teams did not effectively 'operationalise' and measure their business strategies. There was no common decision platform on which the management teams could decide in which areas and capabilities the company should invest and de-invest. Sun did not know whether individual business units or regions were working on the same strategic goals or if regional activities were in conflict with each other on fulfilment of the strategic goals defined.

The global management team, headed by Scott McNeally (Former CEO and Co-Founder), was impressed by the balanced scorecard case study and decided to define a follow-up task to discuss the possible advantages of applying the balanced scorecard concept to the existing Sun management system and strategy execution process.

At Tokyo, the EMEA Vice President was given the task by Sun's CEO of following-up on a balanced scorecard proposal and validating the conceptualisation of a new balanced scorecard-oriented Sun management system. A follow-up EMEA executive management meeting was accordingly organised in Greece to discuss the newly-defined strategic EMEA goals and how those goals could be operationalised and tracked using the balanced scorecard concept, especially in regard to the latest strategic goals and priorities.

> *'The Balanced Scorecard will help us to improve our focus on strategy execution and to achieve our forthcoming plans .... It is a plan which is achievable and gets the company back to revenue growth and sustained profitability ...'* (EMEA Vice President, 2004, [40])

The statement illustrates that Sun's executive team integrated the balanced scorecard approach into their planning and management processes, with the expectation in mind of increasing Sun's focus on strategy execution. Moreover, the pressure to mobilize all available company forces to drive and implement the new business directions required an effective approach. At that time, Sun had too many ongoing and misaligned activities, which increased the difficulties in initiating and implementing new business directions. In this regard, the BSC rapidly received very close management attention, especially from the EMEA executives, which led to the decision to launch the BSC initiative.

### 7.2.1 Definition and Vision of the Initiative

Sun started to discuss and reshape the company's existing management system. One the first steps of the BSC initiative was to implement the balanced scorecard approach across the EMEA region before the new and centralized management approach was implemented globally into Sun's existing planning and management processes. In this context, the BSC initiative core team members defined Sun's management system, which should be enhanced through the BSC initiative in the following.

> *'The EMEA Management Systems is a set of processes, events, metrics, and accountabilities by which the organisation plans and executes our strategies, priorities, and goals.'* (Headquarters Director & BSC Core Team, 2005, [17])

The BSC initiative received increasing attention as a solution for Sun's strategy execution and as a means of renewing Sun's existing management system - starting with the EMEA region and then rolled out globally.

Overall, the BSC initiative can be described through three aspects. Firstly, the BSC was understood as an enabler in the management of Sun's existing business planning and strategy execution environment. Especially during a period when Sun was facing major challenges, more accurate and more comprehensive strategy execution capabilities became important. The selling units and regions worldwide, including the EMEA time zone, had not reached their sales and revenue targets over the last few quarters. The company was losing money and the management teams did not fully understand why. There was no common measure and management system in place. Secondly, Sun's EMEA executives saw the BSC initiative as a means of establishing an integrated framework in which to describe the strategy execution process transparently through the use of performance measures linked in four balanced perspectives: *Financial, Customer*, *Internal Process*, and *Employee Learning and Growth*. For Sun the balanced scorecard retained traditional financial measures. However, financial measures tell the story of past events, which may have been adequate in the case of industrial-age companies, for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures were inadequate for guiding and evaluating the journey that information-age companies like Sun must undertake to create future value through investment in customers, suppliers, employees, processes, technology, and innovation. Secondly, the BSC initiative was defined as a means of increasing and consolidating Sun's different performance perspectives. Regional units and countries were not comparable with each other. Management teams were unable to derive actions for improvements

and learn from better performing regions. Thirdly, the balanced scorecard initiative was characterized and recognised by the management team in terms of three characteristics. The first concerned the measurement system. All selling units should progress with their business operations in the same direction and with the same key performance measures based on a central measurement system applied across the company. The second characteristic concerned the new strategic management system of Sun. Executives and management teams should enhance their leadership style through a more fact-based decision-making process. Finally, the BSC initiative represented a new approach to the effective communication of Sun's business strategies and related changes. In this context, the balanced scorecard approach was used as an effective communication tool for Sun's management people in the future.

In particular, the EMEA executive team strongly believed that it was the right time, and also essential, to invest in and enhance the firm's overall strategy planning and monitoring approach through the BSC concept. The balanced scorecard vision thus emerged, and it entailed transforming the de-centralised planning and monitoring capabilities of the entire company into one central concept. Everyone in the company should become integrated into the strategy execution process by understanding, following, and implementing Sun's strategic objectives in relation to their individual goals and objectives, as illustrated in Figure 20.

Figure 20: BSC Initiative Vision and Scope.

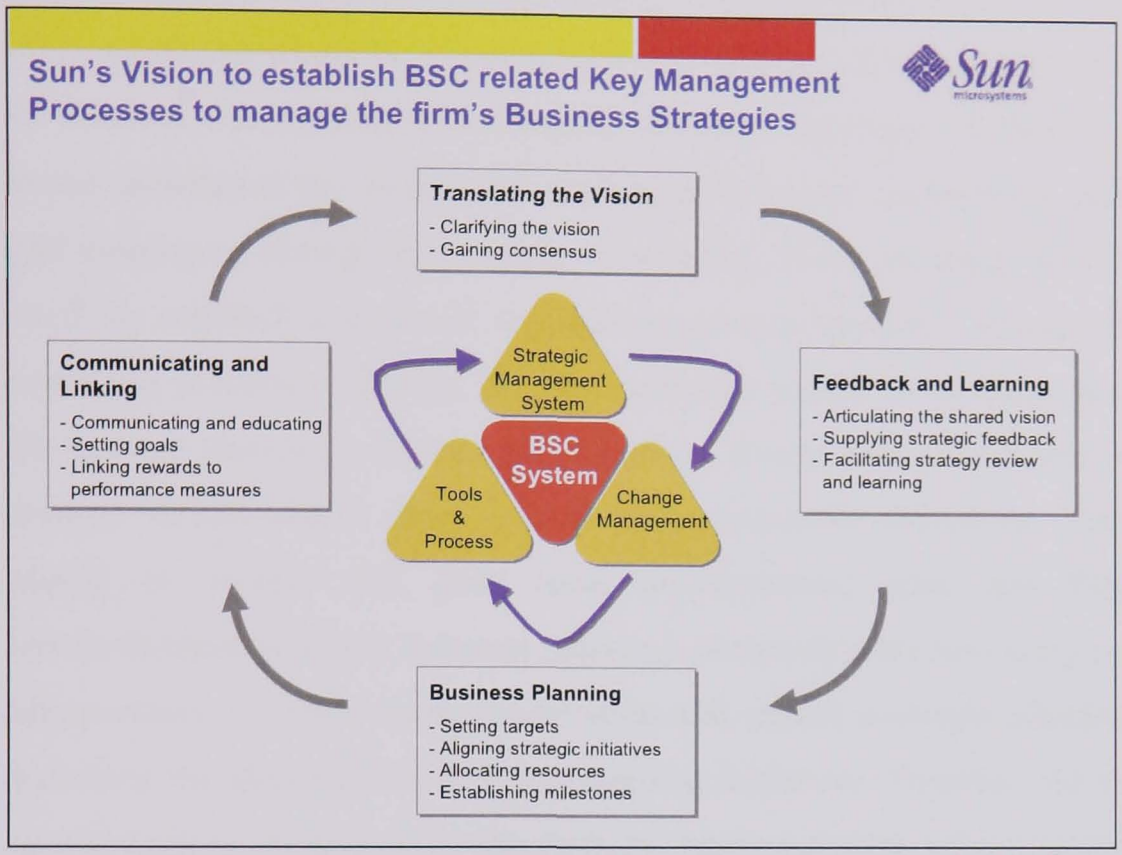



Figure 20 shows the vision of how Sun's executive teams manages the company's business strategies across the entire organisation by including different aspects. Firstly, the BSC initiative would help Sun to establish strategic consensus across the different departments and business units. Everybody within Sun would follow the same vision and directions based on a common understanding. Secondly, the BSC initiative would implement a processes and concepts to enhance common understanding. Moreover, every business unit and department would receive the possibility to articulate their contribution to implement the shared vision and strategy of Sun and provide their feedback on their strategy execution experience to Sun's executives and management teams. In this context, "Playbooks" were used as a document template with which to formulate, describe, distribute, and communicate the company's worldwide strategies and goals across the organisation. Moreover, all departments, teams, regions, and selling units started to record their goals and activities in their playbooks, which were referenced to the responsible management team's playbook and used as templates for the playbooks of further sub divisions and units. Beside measurement of defined KPI's, Sun's playbooks were reviewed by the managers responsible and were used as collaboration and communication tools to

keep the organisation aligned with Sun's strategic goals across the different layers (EMEA layer, Selling Unit (SU) / country layer and individual employees). Hence, every employee would be linked to the same strategy planning and execution process, in which it was envisaged that regular feedback meetings would help management teams understand the issues and challenges that were confronting individual teams and employees during their strategy execution. These meetings would become the basis for establish a feedback and learning process on Sun's strategy definition and execution processes. Thirdly, the BSC initiative aimed to establish modifications of the existing planning processes and templates. Every management team of a region or country should follow clear defined and measurable objectives. Those objectives should be in-line with their local organisational units and Playbooks. The standardisation of Sun's business planning processes were necessary to increase the effectiveness of Sun's strategy execution and related resource allocation processes, including the alignment of different ongoing initiatives. Fourthly, the BSC approach should help to communicate the strategy implementation achievements and linking rewards to performance measures by establishing a performance culture across the organisation – moving in one direction.

Overall, to establish the vision by enhancing and modifying the described focus areas the BSC initiative was defined by Sun's executives as a source for three enabling levers, illustrated in Figure 20. Firstly, the programme would establish all relevant approaches and concepts as the definition of key performance indicators to measure strategy performance and implement those concepts into Sun's new and centralised management system. Secondly, the new BSC approaches and concepts would be enhanced through new BSC tools and necessary processes (e.g. planning and review etc.). Thirdly, to establish those approaches, processes and concepts the BSC initiative would drive a substantial change in management approach to facilitate the required changes.

Nevertheless, the BSC vision just illustrated created new areas of discussion within the management teams. On one hand, various regions and countries would have to give up their strategy planning competencies, and on the other, the results of those

regions would be measured against the key performance defined indicators for their regions. Hence, the regions and countries would lose their flexibility in reporting their results and business performances. At that time, every region was struggling to achieve positive results and the central balanced scorecard-driven planning vision heightened some fears within regional management teams that they would lose control over their 'figures'. Nevertheless, the EMEA executive team was determined to turn the vision into reality and increase transparency and control in those challenging times.

### 7.2.2 Strategic Objectives of the BSC Initiative

The BSC initiative heightened EMEA top management's attention after the EMEA executive team met in Greece for a three-day follow-up strategic review and planning workshop. The outcome was that the top management team realised that various challenges were facing the current Sun organisation and the company's business operations. The employees were not aligned with the strategy, and a large number of them did not understand it. At the same time, uncoordinated programs were launched, for instance Sun Sigma, as well as various revenue improvement projects. Nobody could effectively determine whether the company was fulfilling its strategy and how those ongoing projects would help the company to achieve its strategic goals. At that time, no common management system was in place, including the measurement of key metrics which aligned with the strategy so that key business decisions could be made.

> *'I believe the balanced scorecard concept enhanced our current management system and created the chance to consolidate our de-fragmented management operations into a single management system...'* (Headquarters Director & BSC Core Team, 2005, [17])

The EMEA top management team saw an opportunity to improve the challenges identified through the BSC initiative because more consistent metrics of success would be established. In this regard, the EMEA executives emphasized the need to

establish a single cohesive management system with fact-based perspectives which would drive qualitative business actions. Furthermore, they strongly believed that they were on the right track and formulated the strategic objectives of the BSC initiative in Greece, as now described:

Table 30: Overview of the key objectives of the BSC initiative

| Key Objective | Description |
|---|---|
| • Make the Sun strategy more operational | • Align and break down the company's strategic directions into necessary business operations<br>• Close the gap between high level vision and strategy definitions and existing business activities and projects<br>• Provide a way to break high level strategies down into tangible business actions |
| • Align organisations with the strategy | • Align different business lines like GSO, PS, and SSO in executing Sun's strategies<br>• Establish strategy consensus among the various business units<br>• Reduce the organisational silos of the three main business units, GSO, PS, and SSO, by establishing consolidated and cross-divisional business measures<br>• Utilize business synergies (cost base) among different business units to execute the same business strategies |
| • Make the strategy "everyone's everyday job" | • Reduce the fragmentation of the organisation, support the process whereby all business units moved in the same directions<br>• Improve strategy understanding among Sun employees through consistent measurements and goal definition processes |
| • Establish strategy execution as a continuous process | • Support the establishment of new business strategies and directions in the market<br>• Establish a process for the measurement and monitoring of Sun's new business strategies |
| • Mobilise change through implementing BSC in the Sun leadership mindset | • Increase the focus of management attention and capabilities on the continuous monitoring and execution of the company's business strategies |

| | |
|---|---|
| | • Establish the strategy definition process given Sun's need to find and execute competitive strategies in order to maintain its market shares in a shrinking and highly competitive market<br>• Support the leadership process whereby the EMEA and global management team acted as a single Sun Microsystems, Inc. (SMI)<br>• Improve Sun's leadership style and planning capabilities |

Besides defining the strategic objectives and launching the BSC initiative, the EMEA executive team decided to communicate their strategies and business directions through strategic objectives and priorities in relation to increasing strategy understanding and getting closer to the balanced scorecard approach.

In 2003, the EMEA executive team defined Sun's strategic priorities and objectives, according to the BSC concepts. In this relation, Sun's somehow unclear and complex business strategies (feedback from different employee surveys) were broken down into 6 key focus areas. Furthermore, everybody within the company was challenged to follow and support the defined key areas with their individual contribution, illustrated in the following table.

Table 31: Strategic key priorities and objectives for Sun in 2003.

| Key Objectives | Description |
|---|---|
| • Customer Excellence | The aim was to improve Sun's quality to the point that its customers take excellence from Sun for granted. Sun's management team defined the number one priority as being to improve existing customer operations and take over responsibility for emerging customer issues from the sales force. |
| • Empowered Selling | The second priority and key objectives included directions for Sun's sales force to provide solutions for emerging customer issues. Furthermore, sales and customer-facing teams should be empowered to make decisions for their customers by responding and acting faster, and more as trusted business advisors. |
| • Accountability | Each employee should become more accountable for existing and |

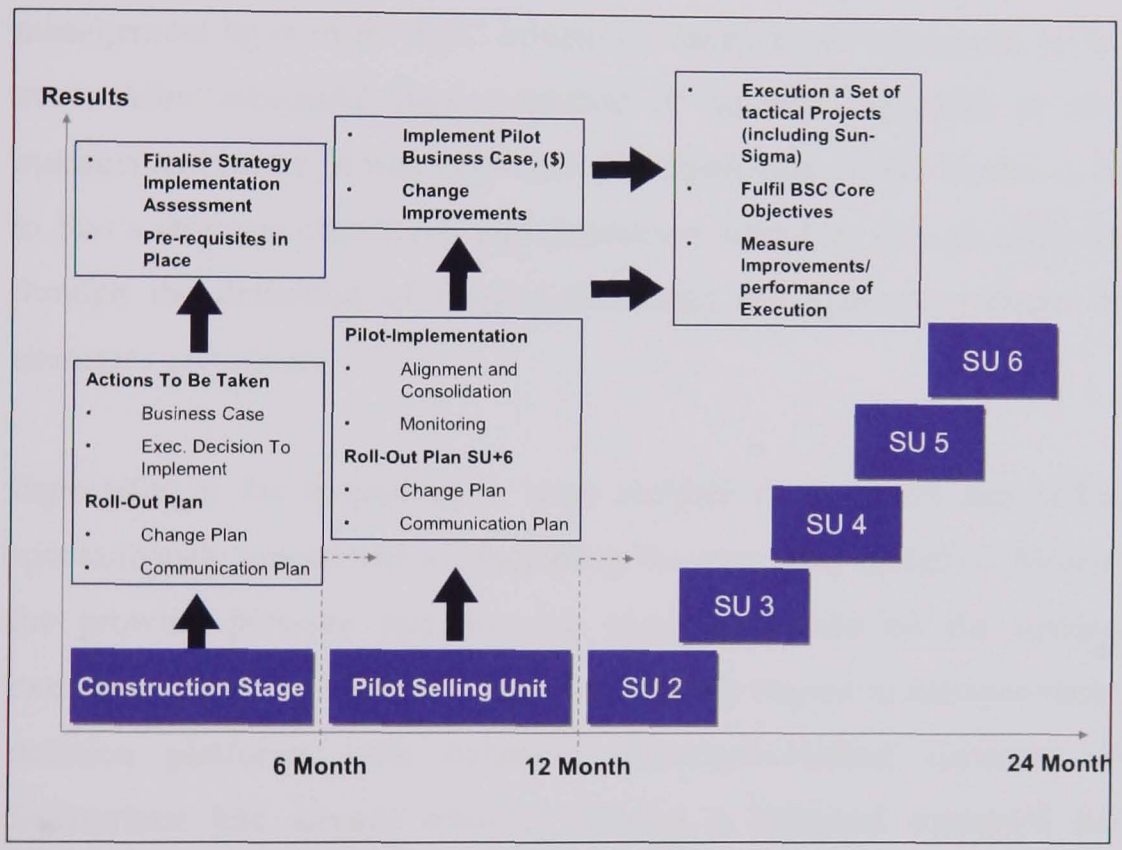
| | |
|---|---|
| | future customer promises. This required turning promises into actions and delivering valuable customer solutions, instead of making other departments and business unit responsible for the fulfilment of different customer requirements. |
| • Solution Selling | Changing the way Sun sold to focus more on engaging with Sun's customers should have established new revenue streams for the company. it was intended that offering business solutions instead of single products would characterise Sun's future customer engagements. |
| • Improve Skills | A focus on building skills would allow Sun to work with its customers to deliver value from the products, solutions and technologies that the company produced. |
| • Partnering | Partners became more and more essential for Sun. The management team believed that Sun's business solution, products, and technologies could be offered to more potential customers through effective partners by reducing sales costs at the same time. |

The way in which the six strategic objectives were communicated to the wider organisation was part of the result of enhancing the new EMEA strategic planning process with new balanced scorecard oriented elements. In relation to the strategic objectives illustrated, the EMEA executives expected everyone and all ongoing projects within the EMEA region to become aligned through the BSC initiative implementation in support of those strategic objectives and priorities. Therefore, the BSC initiative raised the expectations not only in improving the communication of Sun's business directions and key objectives. Furthermore, Sun's executives expected the BSC initiative implementations to go hand in hand with the improvement of Sun's overall strategy execution process, according to the defined key objectives and priorities.

## 7.3 Implementation of the BSC Initiative

The EMEA executive team's plan was that the BSC initiative would be rolled-out globally. Like many other initiatives, it was rolled-out in two phases. The aim of phase I was the EMEA-wide implementation of the BSC approach, while phase II involved – after successful implementation of phase I – the worldwide implementation and roll out of the BSC approach. In detail, phase I was intended to be completed within 24 months, illustrated in Figure 21.

Figure 21: Phase I implementation roadmap of the BSC initiative.




Phase I was broken down into three steps. Step one, "The Construction Stage", was to run for a period of six months. The purpose of this Stage was to verify how Sun's strategy could be implemented by conducting a strategy implementation assessment and putting relevant prerequisites in place, such as the change and communication plan and selection of a feasible pilot SU. The second stage, "Pilot Selling Unit", aimed at implementing the balanced scorecard concept in one pre-selected selling unit within 6 to 8 months and collecting experiences on the planned change improvements. The last stage, "Roll-out 6 SU", would extend the new balanced scorecard approach

to the rest of the EMEA time zone SUs within a period of 12 months. Overall, after two years, all 7 SUs within the EMEA time zone should be operating and measuring their business operations through the new balanced scorecard management system.

Furthermore, phase I of the BSC initiative focused on establishing the new balanced scorecard driven strategy performance process within three relevant management layers of Sun. The first layer was the EMEA executive team; the second layer comprised the EMEA Selling Units (SU). One SU were represented by one or more countries. Sun organised smaller countries like Switzerland, Belgium etc. into one logical SU while larger countries like Germany or the UK were separate SUs. The last management layer of the BSC initiative comprised all employees of the EMEA time zone. After successful implementation of the BSC approach at all three EMEA management layers, it was envisaged that employees would be able to link their work to Sun's strategic objectives, and executives would be able to align their employees through the definition of integrated metrics and goals to execute Sun's business strategies effectively.

Especially in the beginning, a large number of countries and selling units were spontaneously committed to supporting the new BSC initiative. Moreover, based on the growing pressure and growing in-transparencies on the company's strategy execution progress, a few countries had already started to enhance their planning and decision platforms with balanced scorecard-oriented concepts. For example, Switzerland had already tried to develop a balanced scorecard for their Swiss management team, and Sweden had developed a scorecard approach with external management consultants from Ernst & Young Consulting. These countries and management teams had already acquired an understanding of how the company's current planning platform and management systems could be enhanced.

> *'...We already conceptualised a balanced scorecard driven approach for Sweden. The current Sun planning and monitoring tools are not sufficient. We increased our market understanding per country and the relevant skills*

> *we needed to develop. The balanced scorecard provided a vehicle to bridge the gap between Sun's goals and our account management activities.'* (CFO CNE Region & BSC Core Team, 2006, [41])

Nevertheless, the concepts in Sweden and Switzerland did not become the vital centre of Sun's management processes, because they consisted more in bottom-up driven approaches isolated from the wider Sun management community and disconnected from the general Sun management approach and leadership styles. However, Sun regions, like Sweden and Switzerland, had already gained some experience with the balanced scorecard concept and the new way of planning and monitoring Sun's business strategies. Therefore Sweden and Switzerland, in particular, increased their support for the BSC initiative, according to the teams created to implement the initiative (Appendix 12). Those implementation teams and related stakeholders started to experience different dynamics and challenges during the implementation processes, as discussed in detail in the following sections.

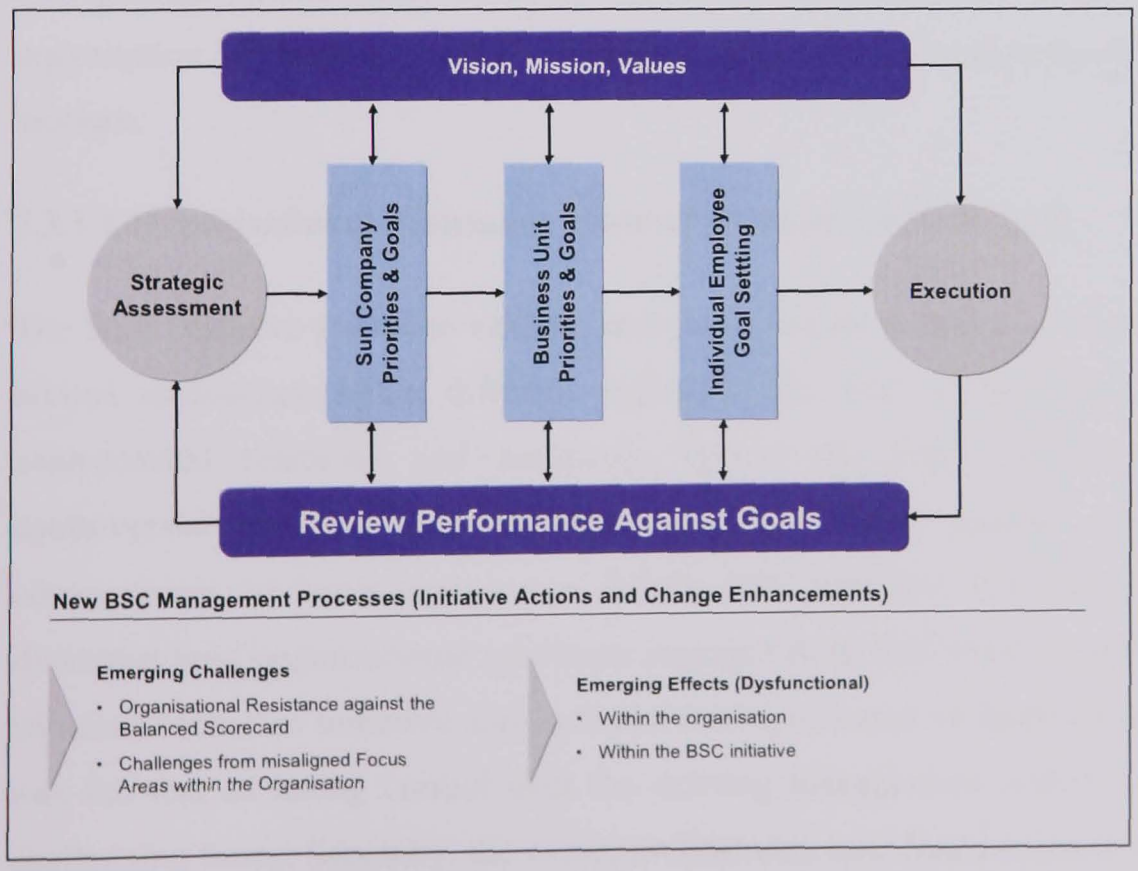
The following sections describe how the BSC initiative interacted with the Sun organisation. In this regard, different executive teams and related management processes were primarily targeted for enhancements by the BSC initiative. In detail, the BSC initiative challenged the existing Sun management approach and aimed to transform it into a more factually based and consolidated central planning one from which different interactions between the organisations and other strategic initiatives would emerge with various outcomes and challenging effects for Sun.

### 7.3.1 Interactions between the BSC Initiative and the firm's Organisational Context

The BSC initiative interacted with Sun's organizational context and created different situations within the organization which generated various challenging effects for the organization and the BSC initiative. These situations are summarised as initiative related challenges. In the context of the BSC initiative two different challenges developed: *organizational resistance against the balanced scorecard* and *challenges*

*from misaligned focus areas within the organization.* The creation of these challenges was stimulated by three different key drivers. Firstly, individual executives and business unit agendas and priorities stimulated the observed challenges and the growth of various challenging effects. Individual business unit agendas and priorities were pushed and protected by various executives and managers even if they conflicted with the company's strategic objectives and goals. Secondly, existing management capabilities and decision structures evolved within Sun's decentralized management environment to challenge the new management approaches and the new management capabilities required. For example, managers created powerful relations over the year and protected each other against major changes. Thirdly, extraordinary challenging business situations (Mode of Operation) produced situations within Sun in which the BSC initiative faced difficulties in proceeding because the executives and managers involved became reactive to the business and developed a fear of losing control over their existing management processes. Furthermore, the employees became disoriented and overall motivation decreased as directions became unclear. Overall, the above-described three key drivers arose within the context of interaction between the organization and the BSC initiative illustrated in Figure 22.

Figure 22: Context of interaction between the organisation and the initiative.



The figure illustrates the new balanced scorecard-oriented management processes of Sun, which were developed and established by the BSC initiative. In this regard, the company vision, mission and values became the centre from which Sun's management teams derived the necessary company priorities and goals as a baseline for the individual business unit priorities and goals and related employee goals.

Each business unit was challenged to align its specific priorities and goals with the SMI priorities and goals. Moreover, throughout the year, each BU was obliged to review performance against its goals. The BSC initiative conceptualized the cycle as beginning with strategic analysis of technology trends, competition, Sun's financial position, partners and channels, marketing and sales, operational efficiency, and the effectiveness of products and services. It continued through goal setting, execution, and evaluation. Sun's Mission, Vision, and Values guided the entire process. Overall the strategy performance reviews comprised two key aspects. Firstly, management teams were pushed to assess Sun's current business situation and derived appropriate priorities and goals to improve the overall strategy execution. Secondly, the previously defined priorities and goals were measured to increase understanding on how the company was performing in the strategy's execution. From these management interactions different (dysfunctional) effects arose within the organisation and within the BSC initiative, as described in detail in the following sub-sections.

#### 7.3.1.1 Organisational Resistance against the Balanced Scorecard

The BSC initiative started to validate and change existing management processes and related approaches within different regions of the EMEA time zone and created controversial reactions and resistance against the BSC initiative. In detail, controversial reactions from different countries created various challenges and consequences for Sun's organisation and the BSC initiative. The following example illustrates how organizational resistance emerged from individual regions against the balanced scorecard initiative approach and concepts, based on three aspects. The first was the fear of losing control over the existing management system, especially in challenging times. Secondly, the example illustrates how Sun's existing management

capabilities and decision structures created organizational resistance against the BSC initiative. In this regard, the third aspect relates especially to the established management relations between Sun managers and executives, who were inflexible and resistant against change.

The first aspect was not observed in Sweden and Switzerland, because those countries proactively supported the BSC initiative and volunteered for the pilot country roll-out phase of the balanced scorecard approach. In contrast, France for instance, paid relatively little attention to the new ideas. France was in a very difficult situation at the time. The France SU reported significant drops in revenues and margins. Key customers in France turned to Sun's competitors and reduced the number of Sun projects in their organisations. Sun's management team in France was overwhelmed by this extreme situation, followed by hesitant decision behaviours and fear. Besides addressing these challenges, the BSC initiative aimed to increase transparencies and relations between key performance drivers and results for every country and SU. France increasingly dissociated itself from the idea of implementing the balanced scorecard concept.

> *'I don't think the balanced scorecard would help us to fix the situation in France. We should try not to increase the complexities in France. The France selling unit faced big challenges and problems, which we needed to sort out first.'* (Senior PS VP Executive & BSC Core Team, 2005, [13])

This example illustrates two aspects. Firstly, those regions with difficulties in business operations like France resisted the new balanced scorecard approach. In especially challenging times, management teams like France feared losing control over their management systems. Those executives and managers were not ready to relinquish their control on the existing management approach and system and raised resistance against the BSC initiative. The outcome of this executive management behaviour was that the BSC initiative faced delays in increasing its transparency

across the EMEA time zone as countries like France raised barriers against implementing and executing the key performance measures of Sun's latest business strategies.

The second aspect relates to the requirements of the new Sun management capabilities and how those obstacles created organizational resistance against the BSC initiative and related change enhancements. EMEA executives required to enhance their decisions base to avoid not taking decisions on financial indicators alone. In particular, customer perspectives, internal qualities and process excellence perspectives, and people perspectives should have been the centre of a Sun manager's interests and decision baseline. However, changing the existing planning and management capabilities required a major shift in existing management behaviours, routines, and styles and created organisational resistance. The management team in France was not sufficiently objective to accept the major changes taking place in markets. During the e-Business boom years, France was one of the regions with strong growth rates. Its young organisation increased its operations in a very short period of time. Therefore, Sun employees and managers in France, like in many other countries, were used to acting very entrepreneurially in a highly decentralised business environment and had a wide range of decision powers.

> *'I expected to reduce the ability of regional managers to make decisions which are good for their regions but bad for Sun ... the balanced scorecard should help us to sort out this difficulties ... '* (EMEA Executive & BSC Core Team (Sponsor), 2004, [19])

Managers were used to making their own decisions and building up business operations. These capabilities became obstacles against the idea of establishing one central management system. New management capabilities were required, and the organisations in France and Portugal, for example, were not prepared for these changes.

> *'...Our strength became our weaknesses. Sun managers were always used to making their own decisions. The headquarters gave them a wide range of competencies and decision power. In my understanding, the balanced scorecard concept reduced the possibility that every country should define its own success metrics and interpretations. This is something against the company's DNA'* (Senior PS VP Executive & BSC Core Team, 2005, [13])

France and Portugal were reluctant to accept ideas on changing their existing management capabilities, and they increased their resistance against the new centralized balanced scorecard-oriented management system. The management style and routines of those countries did not match the BSC initiative's ideas, objectives and concepts. Management decisions became too slowly transparent, which was challenging because of the shrinking revenue and margin responsibilities for a wide range of managers. In this regard, two consequences emerged. Firstly, the BSC initiative was struggling to fulfil its goals and objectives, which raised challenges and additional complexities concerning BSC initiative resource needs and the value creation. Secondly, inadequate management approaches and related ongoing decision-making process were strengthened, which reduced the option of optimizing company activities and ongoing projects due to the execution of the defined strategic objectives and goals.

The third aspect of organizational resistance against the BSC initiative arose from inflexible management structures and personal relations between various Sun managers and executives. The BSC initiative was initially launched to enhance Sun's existing management system. However, the goal of bringing about sustainable change in the company's existing management capabilities and style could not be achieved on a wider scale. In the first step, key managers and leaders of Sun supported the vision of changing the way in which Sun planned and executed new business strategies. Nevertheless, too many reactive and traditional management forces minimised the

success in establishing new and sustainable management capabilities. One of the main reasons for these barriers was Sun's strong insider management network ('old boy network'). Sun managers and executives had known each other for years, and the manager and executive churn rate was very low in comparison to Sun's competitors. This situation and the compact network were very difficult to change. although some of Sun's managers decided to do so and launched individual Sun Sigma improvement projects similar to the BSC initiative. Therefore, no manager or executive was committed to taking the risk of pushing the organisation to change the existing management capabilities and style and reduce the competencies of other managers and executives.

Table 32: The effects and their implications

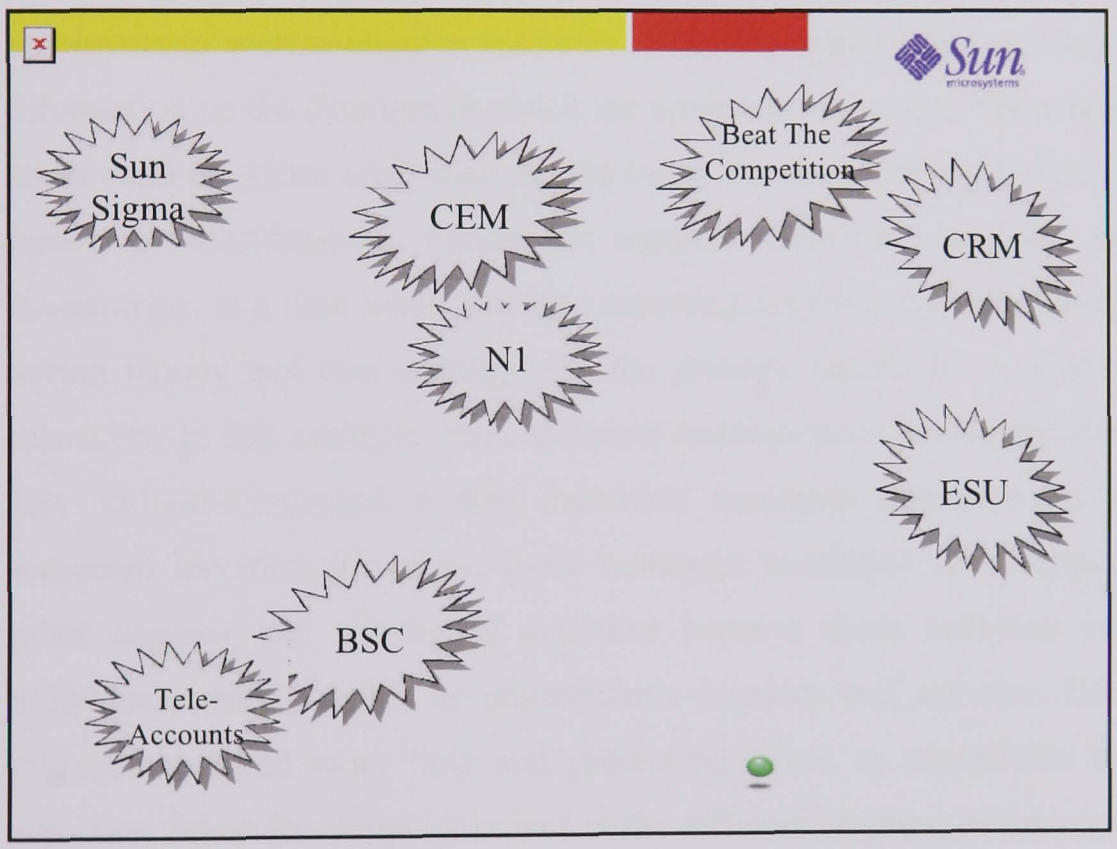
| Initiative Activities | Effects | Implications |
|---|---|---|
| (31)<br>• Apply the balanced scorecard concept to the EMEA region | • Critical business situations reduced acceptance of the balanced scorecard change enhancements within some countries and created delays for the whole region | • Countries like France were in a challenging business situation and reduced their business focus on the balanced scorecard activities<br>• The fear increased among various managers and executives in France of losing control over their management processes and approaches<br>⇒ *Challenging business situations increased resistance against change in existing management capabilities and approaches and increased the pressure on the BSC initiative to establish change enhancements* |
| (32)<br>• Enhance current planning perspectives and increase transparency on Sun's business performance | • Actual competencies and management capabilities increased barriers according to the planned balanced scorecard changes | • Sun managers and executives had a wide range of decision power and freedom in defining the management style and planning approaches<br>• Existing management and planning capabilities (routines and processes) were de-centralised and differed from country to country and among SU within the EMEA time zone<br>• Alignments of current project activities with Sun's strategic objectives and goals were delayed and created inefficiencies<br>⇒ *Actual management capabilities were contrary to the BSC initiative plans and created barriers against changes, which increased the complexities within the organisation (e.g. lack of transparency and facts etc.) and BSC initiative (delays in expected changes, additional resources to intensify efforts etc.)* |
| (33)<br>• Consolidate and change existing management | • Existing management relations established | • Managers had created a strong relationship network within the company over the years (low churn rates between managers)<br>• Owing to the BSC initiative, some of the managers started similar improvement projects based on the Sun Sigma initiative support |

| | | | |
|---|---|---|---|
| approaches and styles | solidarity against the planned BSC initiative changes | ⇒ | *Managers supported each other and established solidarities to protect their existing competencies and decision power, which raised organisational resistance against the planned changes of the BSC initiative* |

### 7.3.1.2 Challenges from misaligned Focus Areas within the Organisation

Different complexities and effects arose from ongoing and misaligned organisational focus areas and challenged the organisation and the BSC initiative. The organisation was too fragmented and too many ongoing activities facilitated this challenging situation in the context of the BSC initiative, as illustrated in Figure 23.

Figure 23: Ongoing and part wise misaligned strategic topics in 2002.




The figure illustrates various focus areas in the company and the challenging situation of Sun not knowing where to invest its scarce company resources to drive execution of the firm's strategic objectives.

> *'There was in my view a lack of focus definitely. In my view it was a sort of muddling through this situation. There was no real clear strategy, no real clear*

*direction and no real clear messages coming out from the corporation...'* (Senior Sales Manager & Customer Representative, 2004, [1])

The consequence of these misaligned focus areas was that too many ongoing activities were disconnected from Sun's current strategy execution plans and created different complexities and inefficiencies based on the interrelations between the organisation and the BSC initiative. Those complexities and challenges can be best described with the following three examples.

The first example relates to the lack of information and the disorientation of Sun's employees as various ongoing activities and issues reduced the emphasis on providing information on the direction in which the company was going. The employees did not understand on which areas they should focus. On the other hand, those activities and issues as illustrated in Figure 23 required immense company resources and investments, at a time when Sun was reporting negative quarterly results. Surviving, saving money and cost cutting were the primary targets for a wide range of Sun managers. In this example, three different consequences for the organisation and the BSC initiative emerged. Firstly, individual managers supported the new balanced scorecard direction. However, those managers continued their support for various other ongoing and misaligned activities because those activities supported their individual business unit's or department's interests and agendas. Hence, the BSC initiative required more time and project resources to consolidate the misaligned activities. Secondly, people involved in the different ongoing initiatives, including the BSC initiative, became tired and disoriented because it was difficult for a wide range of Sun employees to understand the priorities and business focuses. Sun employees worked for different projects and those projects were often suddenly halted.

*' ... it is hard to get people on board... first we invest a lot of effort to get them on board and then they get sacked by our management ... we reinforced our Swiss BSC team several times – first, our management*

> *approved the required project headcounts and then they reduced it because of cost saving reasons or something similar ...'* (Deal Manager & BSC Team Switzerland, 2005, [39])

This situation reduced the motivation of Sun's project teams, with the outcome that new projects became difficult to sustain, and results were often delayed. Thirdly, both outcomes, as the own interests and priorities of different Sun business units and the decreasing motivation of disoriented project team members, within an unstable project environment reduced the overall commitment of various project team members. In this regard, the initiative was challenged to receive enough project resources and the organisation became challenged to support the projects sufficiently.

The second example relates to unclear decision competencies and related inefficiencies in deciding on the direction in which the company should go. In this context, the balanced scorecard affected the organisations strategic priorities and decision making processes.

> *'...our management system should provide the baseline for decision finding and making. I think the balanced scorecard increased the spectrum not only to make decisions which are based on financial indicators. '* (EMEA Operations Manager & BSC Core Team Member, 2006, [29])

However, the BSC initiative paradoxically increased the existing situation of unclear decision competencies and the fuzziness of Sun's future business directions. Firstly, organisational units like PS and SSO lost some of their decision power. The new management system was mainly supported and conceptualised by GSO. Moreover, Sun's strategic objectives were defined and implemented through the GSO's executive management team, headed by a GSO Vice President. The purpose of this new concept was to link all ongoing activities, projects and efforts with the current

strategic objectives. Nevertheless, the PS and SSO managers did not accept all the concepts from the GSO. The GSO's dominance within the BSC initiative created additional discussions and new requirements from the PS, and SSO organisations emerged as a prerequisite for fulfilment of the GSO-defined strategic objectives and goals. Furthermore, the balanced scorecards and goals formed the new baseline for the quarterly reviews. Various country and regional managers started to present excuses and justifications for not fulfilling the goals needed to be in line with the GSO-defined scorecards and goals. Hence, the BSC initiative faced complexities in integrating all relevant business units and stakeholders into the new strategy management process.

The third example relates to Sun's management community and its freedom to take its own decisions on launching and managing strategic Sun issues. Before the balanced scorecard period, Sun managers had been free to manage and solve the company's strategic issues in their own ways. This situation was challenging in difficult times. The company was unable to find its focus and could not start to optimise existing resources with the company's top business priorities. Moreover, Sun was forced to reduce its workforce after the company reported a series of negative quarterly results. However, the company still continued to manage its business in the same way – through individual managers and executive teams. Therefore, increasingly lost its business focus by starting individual activities without realising that the necessary resources were not available or the planned activities were not aligned with the overall company direction.

> *'The sales executives of Italy supported our BSC approach to consolidate misaligned project activities and promised to slow down its locally started Tele Account improvement projects as the CRM Convergence initiative would roll-out a unified collaboration tool ... it was exhausting, they agreed and still continued to implement their own plans and tools in Italy...'* (EMEA Marketing Operations & BSC Core Team, 2006, [42])

Existing management capabilities like the managers' freedom to make their own decisions on strategic company issues conditionally influenced the process of increasing the misaligned focus areas of the organisation. Those managers facilitated the situation of 'doing too many things' at the same time. In a situation where company resources became scarce and expensive, this example illustrates how Sun's existing management capabilities increased complexities to link ongoing activities and projects with Sun's current goals and strategy performance processes as some activities and projects were halted by Sun's management team. Nevertheless, new projects were still misaligned, individually launched, and contrary to overall improvement in Sun's strategy execution efforts through the BSC initiative.

Table 33: The effects and their implications

| Initiative Activities | Effects | Implications |
|---|---|---|
| (34)<br>• Enhance the strategy's execution focus and communication within the Sun organisation | • Various managers and executives still supported misaligned activities alongside their balanced scorecard support | • The BSC initiative identified a wide range of misaligned and controversial organisational activities and projects<br>• Misaligned projects were still supported by individual managers to sustain their individual agendas and interests<br>• Individual managers still continued to decide on their own concerning strategic company issues and possible solutions<br>• It was difficult for managers and executives from different departments to immediately discard projects started within their business units<br>⇒ *The continued support for misaligned activities and projects within different business units heightened the complexity of improving the strategy execution focus for Sun* |
| (35)<br>• Improve the overall strategy execution according to the defined Sun priorities and goals | • The project reviews of BSC initiative increased disorientations on Sun's strategic focus and reduced motivation to progress within some project teams, with growing initiative delays and growing resource needs for the BSC initiative | • The BSC initiative reviewed various organisational activities and ongoing projects regarding their impact in driving and fulfilling Sun's strategic objectives and goals<br>• The need to consolidate, reorganise and conclude various ongoing projects and organisational activities increased the disorientation of project team members<br>• It grew increasingly difficult to sustain the progress of Sun projects because the overall opinion within the project teams was that projects were unstable, and they were often stopped.<br>• Continued support of misaligned projects and the growing disorientation of project teams caused delays in BSC initiative results and increased demand for additional project resources<br>⇒ *The project reviews and consolidation activities of the BSC initiative increased disorientation regarding the Sun strategy and reduced the motivation to progress within some project teams* |

| | | |
|---|---|---|
| (36)<br>• Increase the understanding of the Sun strategies and directions within the wider organisation | • The BSC initiative changes made to follow pre-defined company priorities, strategic objectives and goals increased confusion about Sun's strategies and key priorities within different business units | • The BSC initiative was mainly driven and supported by GSO managers and executives<br>• GSO managers and executives started to apply the new concepts first and defined strategic objectives and goals for all Sun business units<br>• Managers from other business units did not understand the GSO-defined strategic objectives and goals and raised new requirements<br>• Balanced scorecard-oriented business reviews caused misunderstandings and misinterpretations among various executives and managers and increased their confusion<br>⇒ *Following pre-defined company priorities and strategic objectives which were mainly developed by one business unit (GSO) caused confusion and misunderstanding within other business units, with the consequence of I BSC initiative results contrary to those originally expected* |

### 7.3.2 Interactions between Strategic Initiatives

Sun started to establish concepts to monitor progress in the implementation of Sun's strategy through global key programs like the BSC initiative. These strategic key programs interrelated with each other, and they produced different situations with different effects on the BSC initiative and other strategic initiatives. In detail, interrelations between the BSC initiative and other strategic initiatives came about in various ways. The BSC initiative was started at a challenging time and focused on how strategies could be defined and implemented within Sun. Furthermore, Sun launched through its SBAP department a wide range of complex and global strategic initiatives – in the opinion of some, far too many. Moreover, various strategic initiatives started to drive activities and changes which did not go in the same direction within Sun's complex and fragmented organisational structures.

> *'You know, our scope was to align all ongoing strategic initiatives with the strategy ... it was a mess, every program moved on with their plans ... I think the Balanced Scorecard program faced a huge challenge to align all those programs and ongoing projects with Sun's strategy'* (EMEA Operations Manager & BSC Core Team, 2005, [29])

The company resources invested in various initiatives and activities were immense and not transparent for the management teams responsible. In the context of the BSC initiative, the overall challenge emerged whereby managers on one hand recognised growing business complexities, and on the other, lost their focus and identification with Sun's existing and new business strategies. Over time, fewer managers were able to link their activities to the strategy performance process. This challenging BSC initiative environment created two different challenges for Sun in the context of interactions between strategic initiatives: firstly, *strategy execution inefficiencies between strategic initiatives* and, secondly, *challenging boundaries and barriers between ongoing initiatives*. Those two challenging situations were produced by three different key drivers. Firstly, initiative individual agendas and interests facilitated the rise of these challenges. Initiative-specific teams and related executives took different decisions or influenced other decisions in order to protect their individual plans and initiative activities according to Sun's existing decision structures. Secondly, the company capability to manage scarce initiative resources within Sun created different challenging situations from which various effects on the ongoing initiatives arose. Thirdly, Sun's existing initiative related resource allocation processes and related company priorities produced difficult situations for the BSC initiative and other initiatives, with somehow unexpected effects.

#### 7.3.2.1 Strategy Execution Inefficiencies between Strategic Initiatives

Inefficiencies in Sun's strategy execution process emerged between the BSC initiative and other ongoing strategic initiatives, with the outcome of deleterious effects on the BSC initiative and other strategic initiatives. As already described in the previous sections, the BSC initiative aimed at enhancing Sun's current management systems. In this regard, the BSC initiative interrelated with all other key initiatives and projects by classifying them according to their value and intensity in driving Sun's strategic goals. Management teams started to apply the balanced scorecard concepts to the current situation.

> *'... your balanced scorecard program helped us to clarify "A-level goals", you know, these goals are*

> *absolutely critical for Sun and "B-level goals" which are defined as quite necessary for our company ... any project that we do at the moment must be able to relate very closely, very tangibly to the A or the B level goals or we should stop doing it'* (Executive Management Team Member, 2005, [3])

The management team began to realize the positive contribution of the BSC initiative to existing business complexities and ongoing initiative activities through the measurement of individual initiative contributions to Sun's strategy execution performance. This contribution stimulated the various inefficiencies now described.

The first inefficiency of this challenge induced change in ongoing initiative goals and objectives. The BSC initiative stimulated other teams to produce their own scorecards: for example, the Sun Sigma and the CRM Convergence initiatives started to create their own scorecards. In detail, the CRM Convergence initiative produced not only new account and engagement management processes but also performance scoring and measurement concepts, defining them as "Account Scorecards". The aim of the latter was to improve (a) account penetrations, (b) solution selling, (c) transparency of account information, and (d) transparency of goal achievement. In this example, the CRM Convergence initiative was inspired by the BSC initiative and created four additional success metrics and objectives. These objectives were then linked to Sun's corporate goals, and the CRM Convergence initiative team ensured that all its objectives and measures related to Sun's strategic goals and priorities. Furthermore, the BSC project induced the CRM Convergence initiative to change its goals and measurement criteria.

> *'Over time every program followed similar goals and objectives ... the balanced scorecard program was launched to strengthen our executives in their decision making to priorities and reduce the complexities of ongoing activities – the opposite happens - after a while*

> *every project or program became very similar. It was difficult to measure individual program contribution on supporting the execution of Sun's strategies as every initiative tried quickly to adapt to the new company objectives and key measures without providing the promised results'* (Global Marketing & BSC Core Team, 2006, [48])

Other strategic initiatives began similar activities, such as the CRM Convergence project, "inventing" new goals and success metrics in order to relate more closely with Sun's priorities and to protect current initiative activities. The challenge of drifting initiative objectives and goals had various consequences, which are now described. The first consequence was that strategic initiatives in conflict with their original aims reduced their effectiveness in supporting Sun's strategy execution. This dynamic emerged from the BSC initiative's efforts to increase the effectiveness of Sun's strategy execution within different strategic initiatives. The BSC initiative was initially faced by a heterogeneous landscape of goals and objectives for ongoing initiatives, such as CRM Convergence and Sun Sigma. It was thus possible for the Sun management team to start discussing Sun's strategic goals and priorities in the context of the various ongoing initiatives and the relevance of their objectives and goals. Each initiative could be described through its individual goals and objectives and the initiative-specific priorities. Nevertheless, after the first reviews, various initiatives started to extend and interpret their goals in different ways. The idea of the initiative stakeholders was to optimise arguments on the linkage between the initiative's goals and objectives and the strategic goals of the company. Hence, over time every goal and objective of each initiative seemed similar. It became increasingly difficult for the management teams to identify priorities and reduce complexities. The second consequence was that different executives used the drifting initiative objectives and goals for their own interests. Managers and individual executives started to influence various ongoing initiatives according to their own agendas and interests. Moreover, various executives started to sponsor their own initiatives and sought to increase the priority of their initiatives by changing their

objectives and goals, which reduced the overall effectiveness of Sun's strategy execution. These changes created additional complexities for the BSC initiatives and other strategic initiatives. Firstly, additional resources were required to fulfil the new objectives and goals. Secondly, some of the existing results became irrelevant which increased the overall initiative implementation time and the risk of growing delays.

The second inefficiency related to the emerging and inefficient overlapping of ongoing strategic initiatives according to their activities and implemented change enhancements. Initiative teams and related management stakeholders started to increase the complexities in Sun's current initiative portfolio as each individual initiative now began to address and fulfil similar objectives and goals. Hence, inefficient overlaps and unnecessary spending on scarce firm resources evolved. Furthermore, different initiative teams started to monitor more carefully what other initiatives were aiming to achieve and how those individual initiative aims would relate to the actual company objectives and goals. In this regard, initiatives started to overlap or to 'cannibalise' others initiative resources by launching the same activities.

> *'We received more and more KPI's from various initiatives. All of them claimed to support Sun's strategy performance process... We had far too many, something between 40 – 60 KPI's...'* (EMEA Operations Manager & BSC Core Team Member, 2006, [29])

That initiative related 'cannibalizations' of scarce firm resources was the dynamic outcome of every single initiative's claim that it was essential for Sun to assure the implementation of the firm's strategic objectives and goals. Moreover, initiatives started to derive their 'right' initiative specific success metrics (KPI's) in order to increase their individual initiative's priorities and demonstrate its contribution to Sun's strategy execution performance. The consequences for the related initiatives, including BSC was that the overall scope of individual activities extended. At the beginning, the management teams viewed this development as useful. Their assumption was that the teams would increase their focus on Sun's strategic goals and

priorities and challenge their initiatives to increase their support. However, the teams were more interested in increasing the strategic relevance of their initiatives for the top management and executives. The teams recognized that they would gain more attention and resources if the strategic relevance of their initiative increased. Hence, the just-described consequence produced several challenging effects. Firstly, the extent of the initiatives and their objectives produced increasing delays. Initiatives were unable to finish according to their plans and milestone delivery dates. Secondly, individual initiatives became more complex as they sought to address all relevant issues of Sun's strategic objectives. Therefore more and more roll-out and delivery delays were acknowledged by the management teams and the planned improvements deriving from the initiatives could not be utilized in the time expected by the organisation and this was occurring during a critical period when Sun's margins were decreasing and its operational costs were increasing.

Table 34: The effects and their implications.

| Initiative Activities | Effects | Implications |
|---|---|---|
| (37)<br>• Reduce the complexities and ongoing activities due to the defined company objectives and goals | • Initiative objectives and goals and related activities started to change (drifting) and increased the challenge for Sun to prioritise and focus on the defined strategic directions | • Different initiatives included different aspects of supporting Sun's strategic objectives and goals<br>• Initiative objectives and goals started to drift from the defined company objectives and goals<br>• Within the initiatives, different teams started to align their objectives and goals to the Sun priorities<br>• Initiative stakeholders fear ed that their initiatives would lose relevance for Sun, and information on how initiatives supported the Sun strategy became difficult to interpret<br>⇒ *The dynamics of changing and drifting goals of individual initiatives increased the challenge for the management teams to define priorities and reduce complexities of the ongoing initiative activities* |
| (38)<br>• Close the gap between Sun's strategic directions and ongoing initiative activities and plans | • Ongoing initiatives were continuously influenced by various executives and managers and the gaps increased for the BSC initiative and related initiatives to optimise initiative | • Different managers and executives used the drifting initiative objectives and goals for their own interests<br>• Managers and executives started to influence ongoing initiatives due to their individual agendas and interests<br>• Demand started to grow for additional initiative resources and skills<br>• Initiative started to follow other objectives, and some of the original defined initiative goals became irrelevant and caused additional gaps<br>⇒ *Different managers and executives simulated the dynamics of* |

| | | |
|---|---|---|
| | activities | *changing ongoing initiative goals and directions due to their individual agendas and priorities – which increased the complexity of closing potential gaps* |
| (39)<br>• Increase the effectiveness of Sun's strategy execution performance | • Ongoing initiatives started to overlap with each other inefficiently – which reduced the effectiveness of Sun's strategy execution performance | • According to the changes of individual initiative objectives and goals, initiatives started to pursue increasingly similar objectives and goals<br>• Inefficient overlapping (cannibalisation) between initiative resources and activities emerged<br>• Initiatives derived and established new performance measures<br>• Initiative-specific performance metrics increased and reduced effective control on Sun's strategy execution performance<br>• Initiative delays in expected results increased<br>⇒ *Initiative objectives, goals and related activities became increasingly similar followed by a wide range of different performance measures per initiative, which increased the inefficiencies in Sun's strategy execution performance progress* |

### 7.3.2.2 Challenging Boundaries and Barriers between ongoing Initiatives

Different challenging boundaries and barriers emerged for individual initiatives during the interaction of the BSC initiative with other strategic initiatives. These boundaries and barriers gave rise to different effects on related and ongoing strategic initiatives. The situation where the BSC initiative and other ongoing initiatives faced challenging boundaries and barriers can best be described with the following two examples.

The first example shows how the BSC initiative faced challenging boundaries and barriers from the Sun Sigma initiative, with the consequence of various upcoming effects. The BSC initiative was launched at a time when Sun Sigma was at its peak within the Sun organisation. There was great euphoria about Sun Sigma. Everybody was talking about it, and the initiative was moving like a wave across the organisation. Several Sun Sigma experts and related executives proposed to 'converting' the BSC initiative into a Sun Sigma project which should follow the processes and procedures of Sun Sigma. There was little understanding in the growing Sun Sigma community as to why the BSC initiative should not become a Sun Sigma project, follow its rules and processes, and apply its methods. This situation raised boundaries and barriers for the BSC initiative to progress with its initiative plans and activities to fulfil its defined initiative targets.

> *'It was hard to start and continue our work for the balanced scorecard initiative. In the beginning nearly every day I was asked by somebody why we don't follow the Sun Sigma guidelines and procedures... It absorbed a lot of energy and we started be late with our first delivery results.'* (Senior Program Manager & BSC Core Team, 2004, [4])

The Sun Sigma boundaries and barriers increased pressure on the BSC initiative, with different consequences. Firstly, the BSC initiative team became increasingly absorbed with "Sun Sigma Alignment" discussions and how the balanced scorecard concepts related to the Sun Sigma concepts and methodologies. Those interactions forced the BSC initiative to postpone its first delivery results because they could not be delivered on time. Too many alignment and verification meetings absorbed team members of the BSC initiative. Secondly, the BSC initiative was forced to integrate a Sun Sigma expert into its core team. This change increased the BSC initiative costs (additional team member) and the BSC initiative team structure changed. Thirdly, the new Sun Sigma core team member tried to promote Sun Sigma across the teams, which created additional complexities and discussions about the overall BSC initiative objectives and goals and slowed down some planned activities. This constellation was sub-optimal but unavoidable for the BSC team. Sun Sigma applied excessive pressure on the BSC initiative so as to become closer to it.

The second example illustrates that, over time, various ongoing initiative teams increased their barriers against the BSC initiatives. The BSC initiative concepts of focusing and re-aligning Sun activities with the company's strategic goals and objectives created fear and resistance within the different initiative teams. Not all of the initiatives were willing to reduce their activities and reallocate some of their resources to other initiatives with higher priorities. The BSC initiative concept heightened the competition for resources among initiatives by measuring their contribution on Sun's strategic goals. This approach created fear and resistance, so that various teams started to increase pressure on the management teams to reduce

BSC activities and efforts. The general argument was that the balanced scorecard concept would become increasingly complex for other initiatives.

> *'... I felt an increasing resistance against our BSC initiative from other programs ... I think it was fear of being reduced in their project scope and being controlled by us on how their programs are performing against Sun's strategy execution. We all know there were a lot of potential for improvements ... '* (EMEA Operations Manager & BSC Core Team Member, 2006, [29])

Executives from other initiatives increased their criticism that the BSC project was slowing down the progress of their initiatives. Alongside criticisms by other initiative teams, nearly all initiatives had already re-engineered their communications on the initiative goals and measurements and how their individual initiative was driving the company's strategy performance. This revision of goals and objectives increased the difficulties of Sun's management team in selecting and prioritising resources. On the other hand, the initiatives communicated increasing delays and the need for more resources. The question arose as to what was responsible for the increasing delays. Two answers emerged. The first group of managers blamed the BSC initiative for the increased complexities between the initiatives. The second group of managers realised that the initiatives had tried to catch up with all relevant strategies and goals, after the management teams had announced them to the organisation and started to measure performance through the BSC initiative. This effect created complexities and additional activities within the various initiatives which produced further complexities and delays.

In summary, the first stage of initiative boundaries and barriers can be described as strong. Strategic initiatives like Sun Sigma utilised their existing structure and dominance to influence the BSC programme. After the BSC initiative had started to execute its mission and goals, barriers from other programmes decreased. The BSC

initiative facilitated the overall dynamic that other initiatives started to align and change their objectives, goals and related activities according to the defined company objectives and goals. Those activities encouraged the different initiatives to catch up with the new Sun directions and balanced scorecard-related concepts. Furthermore, other programme teams and executives created overlapping activities within their individual initiatives and started to compete for additional resources, which created additional conflicts and complexities within the different ongoing initiatives. The growing complexities of the different initiatives stimulated other initiatives to increase resistance and barriers against the BSC initiative, which reflected the last stage of this challenging situation in the BSC initiative case study.

Table 35: The effects and their implications

| Initiative Activities | Effects | Implications |
|---|---|---|
| (40)<br>• Progress with the BSC initiative activities and plans and establish the balanced scorecard concept across Sun | • The Sun Sigma initiative raised boundaries and barriers for the BSC initiative and slowed down the BSC initiative's progress | • Growing euphoria on the Sun Sigma initiative and related activities across the organisation<br>• Requests from different Sun Sigma oriented managers to transform the BSC initiative into a Sun Sigma project<br>• Increasing complexities and alignment activities between the BSC initiative and the Sun Sigma initiative<br>• The BSC initiative ran into delays as alignment activities between the Sun Sigma initiative and the BSC initiative absorbed scarce initiative resources<br>⇒ *The BSC initiative progress slowed down due to the emerging Sun Sigma euphoria to transform the BSC initiative into a Sun Sigma project, with the consequence of BSC initiative delays in their expected results* |
| (41)<br>• Challenge all ongoing initiative spending due to the defined company priorities and goals | • New Sun Sigma expertise reduced objectivity and created additional barriers against validating existing initiative activities, according to the defined company objectives and goals | • Alignment activities between the Sun Sigma initiative and the BSC initiative gave rise to a request to integrate a Sun Sigma expert into the BSC initiative core team<br>• The new Sun Sigma expert created additional discussions and inefficiencies within the existing team structure<br>• Additional Sun Sigma expertise within the BSC initiative team reduced progress in some of the planned initiative activities and tasks<br>⇒ *New Sun Sigma expertise added to the existing BSC core team created additional complexities and barriers for some of the planned initiative activities and tasks* |
| (42)<br>• Integrate the balanced | • Complexities and delays arose from uncoordinated | • The BSC initiative integrated the strategy review and monitoring processes into Sun's existing business operations<br>• Initiatives started up individual activities to align their activities |

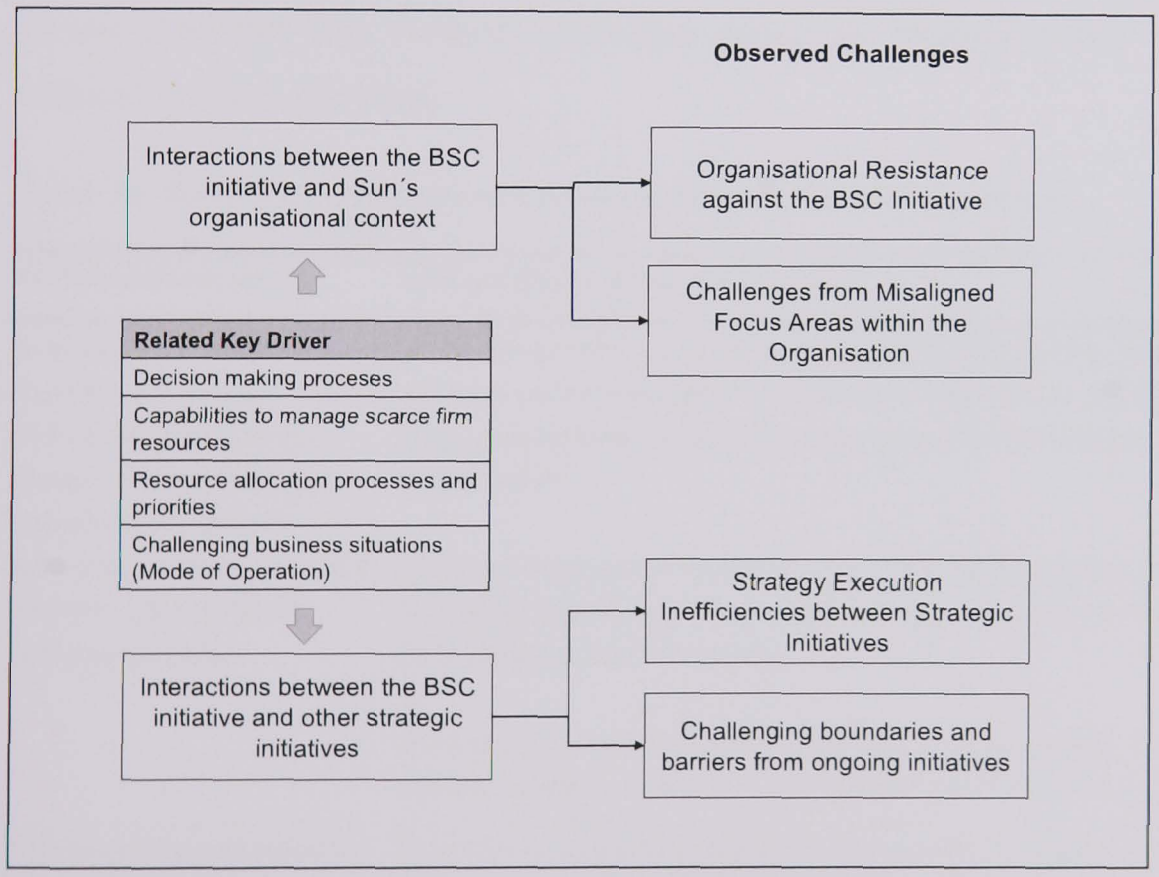
| | | |
|---|---|---|
| scorecard concept into Sun's existing management structures and processes | initiative changes in their objectives, goals and activities created resistance from other initiatives to the BSC initiative | with the defined company priorities, objectives, and goals<br>• The emerging inefficiencies of the overlapping initiative activities created barriers against the BSC initiative<br>• Other initiative teams blamed the BSC initiative for their increased complexities and delays<br>⇒ *Individual initiative related and uncoordinated alignment activities increased complexities for various initiatives and created resistance against the BSC initiative to progress with their plans and activities* |

## 7.4 Summary

This case study has outlined and discussed challenges and effects in the context of the BSC initiative on the basis of interactions between the BSC initiative and Sun's organizational context and interactions with other strategic initiatives. Those interactions gave rise to different challenges from which various effects emerged.

These challenges were stimulated by different drivers and can be classified into two main categories. Firstly, they can be classified according to the observed interactions between the BSC initiative and Sun's organizational context. Secondly, they can be classified according to the observed interactions between the BSC initiative and other strategic initiatives.

Figure 24: Related key driver and observed challenges, in relation to the BSC initiative.




The figure summarises the BSC initiative related key drivers which stimulated the four different challenges classified into two types of interaction. In this regard, the first driver related to Sun's existing *decision making processes*. Business units and ongoing initiative supported and protected their individual interests and agendas,

which generated challenging situations for Sun. Various effects emerged according to interactions with Sun's organizational context and other ongoing initiatives. The *capacity to manage scarce firm resources* illustrates the second driver in the context of the BSC initiative, which aimed to establish new management capabilities and stimulate critical situations based on the company's existing capacity to manage scarce firm resources. Those existing capabilities stimulated different situations and emerging effects within the company. In this regard, the third driver, *resource allocation process and priorities*, created different situations and dynamics, especially within various ongoing initiatives, which generated various challenging effects and outcomes. The fourth driver related to *extraordinary challenging business situations (Mode of Operation)* for Sun, in the context of the BSC initiative. Difficulties within various regions of the Sun organisations created situations which hampered the BSC initiative plans and ongoing activities. Furthermore, those situations caused various difficulties for Sun's strategic initiative and organizational context. Overall, these drivers generated four different challenges during the implementation of the BSC initiative, as now described.

Table 36: Summary of BSC initiative related challenge and emerged effects.

| Observed Challenges | Emerged Effects (Observed Examples) |
|---|---|
| **Organisational resistance against the balanced scorecard:** This situation is characterised by emerging organisational resistance against the balanced scorecard and BSC initiative related activities and plans. | (31) Challenging and critical business situations increased resistance against change in existing management capabilities and approaches, caused BSC initiative delays, and increased the pressure on the BSC initiative to establish change enhancements<br><br>(32) Actual management capabilities and competencies increased barriers against the planned balanced scorecard changes which increased the complexities within the organisation and BSC initiative<br><br>(33) Existing management relations established solidarity against the planned BSC initiative changes to protect their competencies and decision power |
| **Challenges from Misaligned Focus Areas within the Organisation:** This situation illustrates Sun's fragmented organisational structure and related and misaligned ongoing activities, which raised different challenges. | (34) Various managers and executives still supported misaligned activities alongside their balanced scorecard support, which increased the complexity of improving Sun's strategy execution focus for the BSC initiative<br><br>(35) The project reviews and consolidation activities of the BSC initiative caused disorientation on Sun's strategic focus and reduced motivation to progress within some project teams |

| | |
|---|---|
| | (36) Following pre-defined company priorities and strategic objectives mainly developed by one business unit (GSO) caused confusions and misunderstandings within other business units and raised additional challenges |
| **Strategy Execution Inefficiencies between Strategic Initiatives:** This situation illustrates inefficient dynamics and overlapping between initiatives during their individual implementation to support Sun's overall strategy execution progress. | (37) Initiative objectives and goals and related activities started to change (drifting) and increased the challenge for Sun to prioritise and focus on the defined strategic directions and reduce complexities in ongoing initiative activities<br><br>(38) Ongoing initiatives were continuously influenced by various executives and managers and the gaps increased for the BSC initiative and related initiatives to optimise initiative activities<br><br>(39) Initiative objectives, goals and related activities became increasingly similar followed by a wide range of different performance measures per initiative, which increased the inefficiencies in Sun's strategy execution performance progress |
| **Challenging boundaries and barriers of ongoing initiatives:** this situation is defined by different emerging boundaries and barriers between ongoing initiatives in the context of the BSC initiative. | (40) The BSC initiative's progress slowed down due to the emerging Sun Sigma euphoria to transform the BSC initiative into a Sun Sigma project with the consequence of BSC initiative delays in their expected results<br><br>(41) New Sun Sigma expertise added to the existing BSC core team created additional complexities and barriers for some of the planned initiative activities and tasks<br><br>(42) Complexities and delays due to uncoordinated initiative changes in their objectives, goals and activities created resistance by other initiatives against the BSC initiative |

Sun's business is specifically focused on products and services for network computing. The latter has been the company's focus for the twenty years of its existence, and it is based on the premise that the power of a single process, computer, or device can be dramatically increased if it is interconnected with other systems. In this context, the company began to focus on new business strategies which arose from Sun's mission, vision, and values, and from ongoing assessment of how best to help Sun customers achieve competitive advantage through the strategic use of network computing and information technology. The BSC initiative was launched as a strategic enabler to establish a platform for Sun to start a consolidated business review and prioritisation process to increase the effectiveness and support of Sun's strategy execution. In this regard, various challenges, complexities and dynamics were addressed. At first, the BSC initiative achieved some successes, but these were difficult to maintain over time. A major challenge emerged in the context of other strategic change initiatives. Each initiative sought to reshape and communicate its

unique value creation and results according to Sun's strategic objectives and goals differently over time. It became difficult for the management team to identify differences and gaps within Sun's strategic initiative portfolio supporting the new business strategies and directions. These advertising and marketing efforts by individual initiatives created additional complexities and delays. On the one hand. each initiative increased its promises to execute Sun's business strategies over time; on the other, those promises created additional complexities and delays. The promises of various initiatives to support all of Sun's strategic objectives led to extensions in the scope and deliverables of those initiatives. The consequence was that the company was unable to utilize the promised change improvements in time. This result was not expected by Sun's managers; moreover, it was surprising that the Sun strategy execution performance decreased instead of becoming optimized through the new and more factually based management approach. One reason for this response may be the various observed challenging effects and complexities which often produced unexpected dynamics within the implementation process.

# 8 Analysis of the Findings

The empirical chapters on the three case studies focused on each strategic initiative individually within the firm. This chapter analyses and discusses the findings of three strategic initiatives within the firm. Furthermore, the following sections compare some of the findings of the three company case studies to increase the range of the analysis and discussion of the case studies conducted and to find answers to the research questions. In this regard, the main concepts identified from strategic initiative interactions, related challenges and the creation of dysfunctional effects emerged from the analysis of the research. These concepts are less definitive than they might seem. Different research findings may arise from similar social settings, because the research locus and the perspectives taken to anticipate the social reality may vary. Nevertheless, the following analysis is based on the researcher's interpretations and knowledge deemed best able to conceptualise the dynamics of the phenomena studied. Table 37 provides a 'roadmap' to guide the reader through the different analyses and discussion areas of this research project.

Table 37: Analysis and discussion roadmap.

| **Analysis** | **Description** |
|---|---|
| (1)<br>Strategic initiatives | Analysis, comparison and discussion of the three strategic initiatives:<br>• *Sun Sigma initiative*<br>• *CRM Convergence initiative*<br>• *BSC initiative*<br>To provide an overview of the specific characteristics of each individual strategic initiative. |
| (2)<br>Strategic initiative interactions | Analysis, comparison and discussion of the observed interactions:<br>• *between the firm's organisational context and the case study strategic initiative*<br>• *between the case study strategic initiative and other ongoing strategic initiatives*<br>Analysis, comparison and discussion of the challenges emerging from strategic initiative interactions:<br>• *the formation of the emerging challenges observed*<br>• *types of challenges emerging from initiative implementation*<br>Analysis, comparison and discussion of the consequences arising from the emerging challenges – dysfunctional effects:<br>• *Types and characteristics of dysfunctional effects*<br>• *Definition of dysfunctional effects*<br>Developing a theory of dysfunctions from the strategic initiative related dysfunctions which emerged from initiative implementations. |

| | |
|---|---|
| (3) Theoretical analysis and discussion of the findings | Theoretical reflections on the analysis results in the perspective of the main bodies of literature selected, focusing on:<br>• *Interactions of Strategic Initiatives*<br>• *Challenges emerging from Strategic Initiative Interactions*<br>• *Drivers of such Challenges*<br>• *Theoretical reflections on the challenges and dysfunctional effects observed* |

In accordance with the analysis illustrated and roadmap discussed, this section starts with an analysis of the main characteristics, differences and similarities among the three strategic initiatives observed. In addition, the analysis of the observed strategic initiative interactions and discussion of the challenges and various dysfunctional effects observed as emerging challenges and threats to strategic initiative implementation are discussed in this section.

Finally, this chapter discusses the findings on strategic initiative related interactions in light of the resource based theory and the strategic initiative concept, focusing on problematic aspects of combining new and old firm resources, on the knowledge based theory, with theoretical reflection on the implications of the strategic initiative related knowledge creation process, and on the drivers identified in the context of the dynamic capability concept and the theoretical debate on challenges and dysfunctional effects.

## 8.1 Comparison of the Strategic Initiative Characteristics

All three initiatives observed and studied - the Sun Sigma initiative, CRM Convergence initiative, and the BSC initiative - represented strategic profiles for the company. The initiatives related to Sun's strategic agenda, and their purpose was to implement the company's new business strategies. Each single strategic initiative envisaged changes and renewed the firm's existing capabilities and competencies, sometimes with substantial consequences for the entire company and its current sources of competitive advantage. In this regard, all three initiatives had a similar organisational background and reflected the way in which Sun intended to implement its business strategies as part of global and strategic improvements of the company. However, when analysis is made of the interactions and the emerging effects and challenges of the three strategic initiatives *vis-à-vis* Sun's organisational context and

other ongoing initiatives, each individual initiative exhibits unique characteristics despite the similarities of organisational background and organisational structure outlined in what follows.

The aim of the three strategic initiatives was to renew key areas of Sun's existing capabilities and competencies. Nevertheless, because of Sun Sigma's strategic renewal focus, the initiatives' target audience and areas included the entire organisation and all employees of Sun Microsystems Inc. Almost every employee was involved in the global process excellence programme. By contrast, the CRM Convergence initiative focused on the firm's customer facing and support teams. These areas account for between 30% and 40% of Sun's entire workforce. Furthermore, the Balanced Scorecard initiative's target audience was smaller in size than that of the CRM Convergence initiative. The Balanced Scorecard initiative mainly concerned Sun's management and executive teams, which make up between 10% and 20% of the company's workforce. The next unique characteristic relates to the organisational integration of the initiatives. The Sun Sigma initiative became strongly integrated into Sun's existing organisation. In view of Sun Sigma's objectives, the initiative started to enhance Sun's existing organisational structures with the new Sun Sigma organisation (CAO; Customer Advocacy Organisation). In this context, the Sun Sigma initiative underwent strong organisational integration during the implementation process. In comparison, the CRM Convergence initiative was only to some extent integrated, and during its implementation it focused on the consolidation of Sun's existing and de-fragmented organisational structures, whereas the Sun Sigma initiative represented during its implementation the new Sun Sigma organisation, CAO. The Balanced Scorecard initiative was rather autonomous because it focused on the alignment of organisational and other ongoing activities and objectives. In detail, the initiative did not engage with Sun's organisational environment during its implementation phase. Instead, it sought to review the company's business operations priorities and align them with current strategies in one strategic direction. Moreover, all three initiatives differed in the duration of their implementation. The Sun Sigma initiative was implemented during a period of approximately 5.5 years across the entire company. In contrast, the CRM

Convergence initiative was implemented in 3 years and the Balanced Scorecard initiative in 1.5 years. According to the three initiative case studies, these differences in implementation times may have been due to two factors. Firstly, the target audience and area of each individual initiative differed in size. Whereas the Sun Sigma initiative covered nearly the entire organisation, the CRM Convergence and Balanced Scorecard initiatives only focused on specific areas of Sun's organisation. Secondly, the size and resource requirements of the three different initiatives varied significantly. The Sun Sigma initiative began with a manageable number of different quality and process improvement projects and increased its project activities and scope during the implementation phase, so that, within four years, there were up to 4000 projects ongoing around the globe, and between 10-15% of the worldwide staff had became closely involved in ongoing Sun Sigma improvement activities and projects. The CRM Convergence initiative increased its scope to Sun's global customer facing and support teams and aimed at transforming and renewing Sun's sales and solution delivery capabilities over a period of 3.5 years. In this regard, the CRM Convergence initiative interrelated with between 30 and 40% of Sun's global workforce. The Balanced Scorecard initiative instead had a rather rapid implementation time of 1.5 years, which may relate to the characteristic that the initiative concerned only Sun's global management and executives teams, providing new processes to review and align ongoing company operations and programmes with actual business strategies and priorities. Hence, the initiative was not taken up with intensive transformational activities such as renewing departments, business units, and the skills of sales teams. Nevertheless, all three initiatives addressed the creation of new capabilities with strong deviations from the company's current capabilities and competencies.

The implementation approach used for the three different strategic initiatives is another characteristic which differed for each individual initiative. The Sun Sigma initiative can best be described as adopting a de-centralised implementation approach. Starting with a manageable number of quality improvement projects, the initiative evolved over time into a global and de-centralised programme across the entire organisation. Each business unit, department, and region increasingly developed its

own Sun Sigma competencies and individual improvement and locally-focused quality and process excellence improvement projects, according to the Sun Sigma methodologies and approaches. By contrast, the Balanced Scorecard initiative was based on a centralised initiative approach. The company's de-fragmented and de-centralised business planning and monitoring processes and capabilities were to become centralised and consolidated across the different regions and selling units. Therefore, the Balanced Scorecard initiative activities were rather centrally implemented and managed. In comparison, the CRM Convergence initiative included characteristics of both de-centralised and centralised initiative approaches. The initiative focused on centrally organising the basic CRM business processes in every single region and selling unit. Nevertheless, the initiative also initiated and supported the creation of de-centralised CRM competence centers in order to renew and enhance local sales and customer services with market individual solutions and sales capabilities like knowledge of individual target industries. Therefore, the CRM Convergence initiative approach can be characterised as a trade-off between a centralised and a de-centralised initiative approach.

The last characteristic, which varied by initiative, concerned the intensity of the interrelations, principally those between the strategic initiative and the firm's organisational context and between the strategic initiative and other ongoing strategic projects. Through its de-centralised initiative approach, the Sun Sigma initiative generated strong and sometimes regional independent interrelations across the entire organisation. Therefore, the Sun Sigma initiative reflected a programme which stimulated strong interrelations with the firm's organisational context and other ongoing initiatives, whilst the CRM Convergence initiative created strong interrelations with parts of Sun's existing organisation and other ongoing initiatives. These interrelations related to such specific CRM Convergence topics as solution selling and solution delivery capabilities. Hence CRM-related organisational units and customer-oriented programmes generated interrelations with the CRM Convergence initiative. The Balanced Scorecard initiative had a rather moderate interrelation with Sun's organisational context, because its aim was to align current activities and priorities with Sun's new business strategies. In this dynamic context, the initiative

closely interrelated with other ongoing initiatives, such as those aimed at implementing the company's strategic objectives. The Balanced Scorecard initiative therefore interrelated with other ongoing strategic initiatives in order to align their ongoing activities with the firm's objectives and priorities. The differences among the above-described strategic initiative characteristics are summarised in the following Table 38.

Table 38: Strategic initiative parameters and unique characteristics.

| Characteristics | Sun Sigma Initiative | CRM Convergence Initiative | Balanced Scorecard Initiative |
|---|---|---|---|
| **Strategic Focus on Sun´s existing capabilities and competencies** | Improvement and transformation of Sun's existing business operations and business processes, especially the improvement of Sun's product and service qualities through operational excellence standards. | Transformation of Sun's current sales capabilities, especially increase Sun's sales effectivness by transforming existing transaction- and product-oriented sales capabilities into solution sales capabilities. | Improvement and transformation of Sun´s de-centralized and de-fragmented business planning and monitoring capabilities, especially the improvement of Sun´s strategy implementation processes and capabilities. |
| **Duration** | 5.5 Years | 3 Years | 1.5 Years |
| **Organisational Integration** | **Strong Integration:** extension of the current organisation through a new Sun Sigma organisation (CAO). | **Part wise Integrated:** Transformation and consolidation of existing organisational structures. | **Autonomous:** Validation and improvement on organisational and initaitive priorities and objectives. |
| **Implementation Approach** | De-Centralized | Trade-Off between Centralised and De-Centralised Approach | Centralized |
| **Target Audience and Areas** | Business-Operations, strong back-office focus. Later on front-offices were included in the initiative's scope. All employees. | Strong front-office scope, especially the customer facing teams and support teams. Between 30-40% of Sun´s employees. | Sun´s management and executive teams, including planning and finance departments. Between 10-20% of Sun's employees. |
| **Initiative Size (Allocated Resources)** | **Large-scale**, over 3000 registerd Sun Sigma projects, over 15% of the worldwide staff became strongly involved | **Moderate-scale**, focus on Sun's sales, customer support and key-account teams | **Narrowed-scale**, focus on Sun's management teams. |
| **Intensity of Interactions** | Strong interaction with Sun´s organisation and other global programs. | Strong interaction with Sun´s sales organisation and market-oriented initaitives. | Moderate interaction with Sun's organisation. Strong interaction with other ongoing programs. |

The table outlines the distinctive features of each single strategic initiative, together with their similarities of organisational structure and operational background within the case study company. Overall, the Sun Sigma initiative was the largest-scale initiative, in comparison to the CRM Convergence and Balanced Scorecard initiatives, due to its implementation time, target audience and company areas affected, and size. Furthermore, in all three initiatives intense interactions were observed between Sun's organisational context and other ongoing strategic initiatives.

## 8.2 Analysis of Strategic Initiative related Interactions

The following section analyses, compares and discusses the strategic initiative related interactions on the basis of the three in-depth case studies. The first part focused on analysis and comparison of the different interactions observed between the strategic initiative and the firm's organisational context and interactions between the strategic initiative and other ongoing strategic initiatives. The second part of the section focused on strategic initiative implementation challenges which emerged from different strategic initiative interactions: in detail, the formation of the initiative related challenges, the characteristics of the challenges identified, and the main challenges identified through comparison. The third section defines analyses, compares and classifies the dysfunctional effects consequent on the challenges that emerged. The last part of this section discusses and illustrates an emerging theory of strategic initiative related dysfunctions, constructed with the main concepts resulting from the analysis conducted in the previous parts of this section.

Individual interactions with the firm's organisational context and other ongoing initiatives were observed in all three case studies. In this regard, each individual strategic initiative created different interactions and exhibited different similarities in interactions between Sun's organisational context and different ongoing strategic initiatives. In detail, the different strategic initiative related interactions observed and compared can be summarised as three different interactions between the strategic initiative and Sun's organisational context and five different interactions between ongoing strategic initiatives.

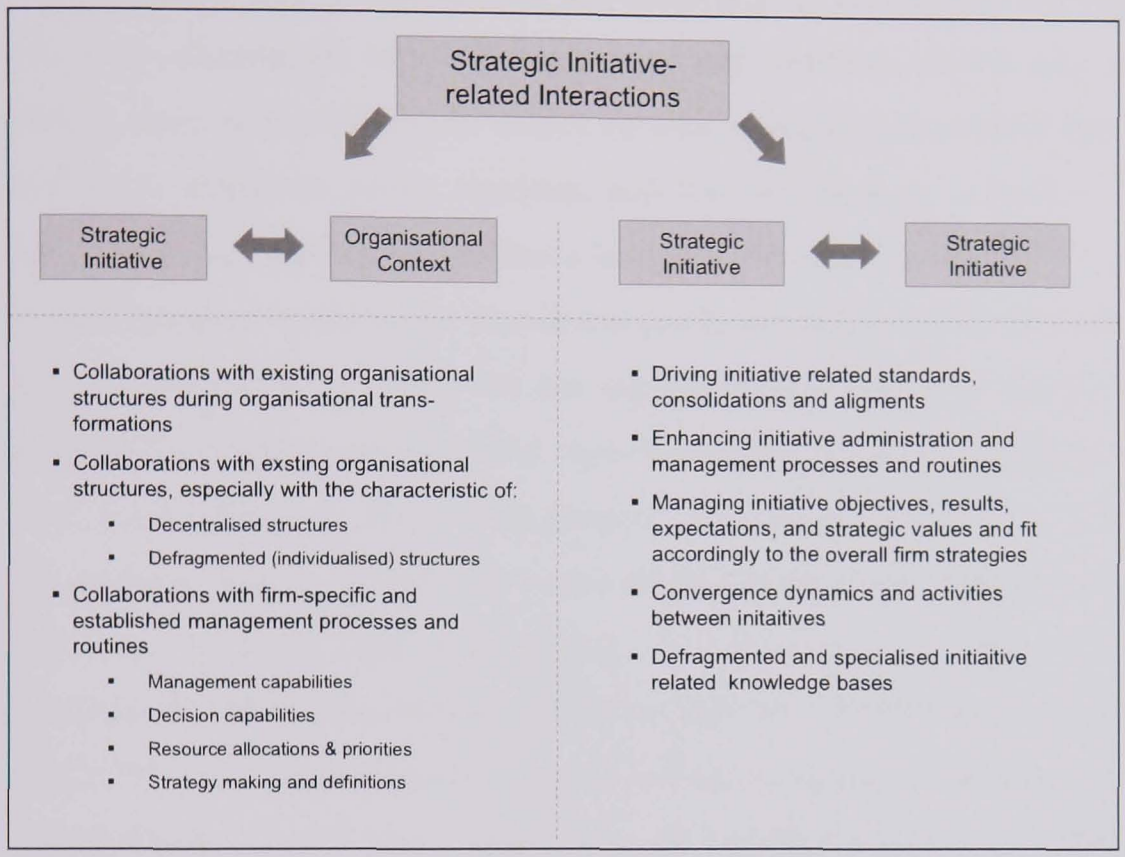
The three types of interactions observed between the strategic initiative and Sun's organisational context related to specific organisational characteristics and management competencies. Firstly, strategic initiative collaborations with Sun's existing organisational structures created interactions during structural changes made to the existing organisation. The changes in the existing organisational structures stimulated interactions and can be defined as the first interaction platform between a strategic initiative and Sun's organisational context. Secondly, collaborations between

the strategic initiative and Sun's organisational context were stimulated through decentralised and de-fragmented organisational structures. In particular, the degree of decentralisation and de-fragmentation reflected the degree of individuality per organisational unit and facilitated different types of interactions. Thirdly, collaborations between the strategic initiative and firm-individual and well-established management processes and routines generated the last group of interactions between ongoing strategic initiatives and Sun's organisational context. In particular, existing and empirically developed management capabilities established decision routines, resource allocations processes and routines to define resource priorities as part of the firm's management capabilities. These areas and processes stimulated interactions between ongoing strategic initiatives and the organisational context of the company.

The various interactions between ongoing strategic initiatives can be summarised in five main units. Firstly, ongoing strategic initiatives interacted during the implementation of initiative related efforts to drive and establish new standards and to implement consolidations across different ongoing initiatives. Standards as unified methodologies, processes, measurement criteria etc. and alignment efforts between ongoing initiatives, like orienting ongoing initiative activities to new business strategies. The second group of interactions between ongoing initiatives occurred during initiative-specific efforts and implementation activities to enhance and change existing strategic initiative administration and management processes and routines. Thirdly, managing initiative objectives, initiative results and expectations involved different interactions with other ongoing initiatives. In particular, activities to manage and review initiative related activities according to their strategic value and fit with the overall firm strategies activated different interactions between strategic initiatives. Fourthly, convergence dynamics between two or more ongoing strategic initiatives established new interactions between these initiatives. In detail, convergence activities like the harmonization of specific initiative goals and objectives stimulated initiative-specific interrelations. The last group of interactions between strategic initiatives related to emerging, de-fragmented and specialised knowledge bases of different strategic initiatives. Those different knowledge bases clashed with other specialised

and initiative related knowledge bases and created new interactions across ongoing strategic initiatives.

Figure 25: Summary of the comparison among the different initiative related interactions.




The various observed and summarised interactions between the strategic initiative and Sun's organisational context and between the strategic initiative and other ongoing strategic initiatives gave rise – together with the expected results – to different challenges with problematic consequences, and which were stimulated by different drivers. These challenges and the relative consequences of emerging dysfunctional effects and their drivers are discussed and analysed in the following sections.

### 8.2.1 Strategic Initiative Implementation Challenges

The three strategic initiatives show that initiative specific drivers produced, alongside the expected initiative results, different challenges during the strategic initiative implementation process. Furthermore, those drivers represented initiative related processes which were activated through the interactions observed or through individual initiative implementation activities and sometimes gave rise to different challenges during the implementation process.

All three strategic initiatives – Sun Sigma, CRM Convergence, and the Balanced Scorecard – were officially defined and communicated by the company as successes. Some managers and executives claimed that the company had seen great improvements in the driving and implementing of the business strategies defined. However, despite the officially-announced and initiative related success stories and results, there were still critical voices, as well as empirical evidence that the company had been subject to strong tensions, and that the strategic initiatives launched had partly failed to implement the firm's business strategies successfully. Today, the Sun Sigma initiative is still under discussion inside and outside Sun, the main issues being that the overall programme was too expensive, and that it is difficult to determine whether the initiative achieved the expected results. Moreover, internals claim that the Sun Sigma initiative was too expensive, and various strategy review papers have documented that the initiative to some extent led nowhere, with the consequence that Sun's management team has decided to reduce its Sun Sigma investments. By contrast, the CRM Convergence initiative has been celebrated as a success story, and since 2005 it has been apparent that the overall company is dealing more openly with solution-oriented offerings, customers, and market approaches. Nevertheless, the company still comprises a strong product-oriented community and mindset. Furthermore, the CRM Convergence initiative required far more resources and investments than initially expected. The third programme; the Balanced Scorecard initiative, was launched as a strategic enabler to establish a platform for Sun to start a consolidated business review and prioritisation process to increase the effectiveness of and support for Sun's strategy execution. In this regard, various challenges emerged during the strategic initiative implementation process and created various challenging effects which often produced unexpected and destructive outcomes within the implementation process. Those side-effects and challenges emerged within all three strategic initiatives and were among the reasons why the overall strategic initiative successes and expected results were slowed down and diminished to a certain degree. In the three case studies conducted, the related drivers and emerging challenges were analysed in detail and compared.

The observed drivers can be described as idiosyncratic processes which stimulated the strategic initiative related transformation activities: in detail, the integration and recombination of old and new firm resources to reshape the firm's sources of competitive advantage (Amit and Schoemaker, 1993; Eisenhardt and Martin, 2000; Winter, 2003). Moreover, comparison among the strategic initiative specific drivers led to the classification of six different processes which were critical for the implementation's success, as illustrated in the following Table 39.

Table 39: Overview and definition of the strategic initiative related driver.

| Driver | Definition and Characteristics |
|---|---|
| Management Support Process | • Support by managers and executives for planned implementation activities and transformations<br>• Support processes and routines by different organisational units, and other ongoing initiatives to support initiative related activities<br>• Focusing management attention on specific topics and implementation plans |
| Decision Process to prioritise and implement changes | • Decision structures, processes, and routines within the company<br>• Defining priorities and goals based on new business strategies and company agendas<br>• Establish decisions for initiative related activities and plans, including changes and transformations<br>• Relations with managerial roles, responsibilities, competencies and decision power to drive and implement initiative plans |
| Organisational Administration and Support Process | • Processes and routines of allocating and re-allocating required and initiative related resources<br>• Strategic initiative related administration and support processes, including methodologies, skills and approaches<br>• Facilitation of and support for initiative related prerequisites to implement individual objectives and plans<br>• Includes initiative related communications and information exchanges with other organisational business units and ongoing strategic initiatives |
| Process of Interpretation | • Interpretation and sense making of the strategic initiative's goals and how those goals relate to the business strategies and executive agendas<br>• Realising and understanding the projected changes in the strategic initiative plans, objectives and aims<br>• Matching and comparing the initiative aims and plans with individual agendas and interests of different organisational units |

| | |
|---|---|
| Process of Acceptance | • Judging strategic initiative objectives, goals and planned results<br>• Judging the value generation power of individual strategic initiatives<br>• Accepting initiative objectives, goals, and planned aims<br>• Recognising, accepting and approving the value of the strategic initiative<br>• Accepting the changes envisaged for a planned or launched strategic initiative |
| Process of Combination | • Ability to combine existing skills, approaches, methodologies and approaches with novelties<br>• Ability to apply new knowledge bases to existing environments and activities<br>• Ability to construct and extend existing initiative knowledge bases with new aspects and activities and content from other ongoing initiatives<br>• Ability to combine new skills and with existing skills |

The six different initiative specific processes emerged in similar ways in the context of various strategic initiative implementation activities and sometimes alongside the expected results, producing unpredictable outcomes, as now discussed.

The definition of different objectives and priorities of the case study initiatives related to the processes of defining priorities and implementing changes (decision process to prioritise and implement changes). Various managers supported specific business unit objectives and agendas by pushing and defending higher priorities in regard to specific objectives of the initiatives, and this led to disconnections from the overall perspective to implement the firm's business strategies efficiently. Furthermore, defining priorities for implementing changes required interpretation of the relevance of the different objectives and goals of ongoing initiatives for the actors involved (process of interpreting and understanding changes): These activities were followed by the process of acceptance. Before executives started to support various changes they judged and approved those changes during the strategic initiative implementation activities.

The next observed and classified driver enabled initiative implementation by mobilising Sun's decentralised organisational and management structures. In detail, this initiative related driver activated the company's management support processes for various initiative plans and activities. These included the activation of different administrative and management processes for the initiatives, for example by allocating and re-allocating experts from decentralised business to ongoing initiatives.

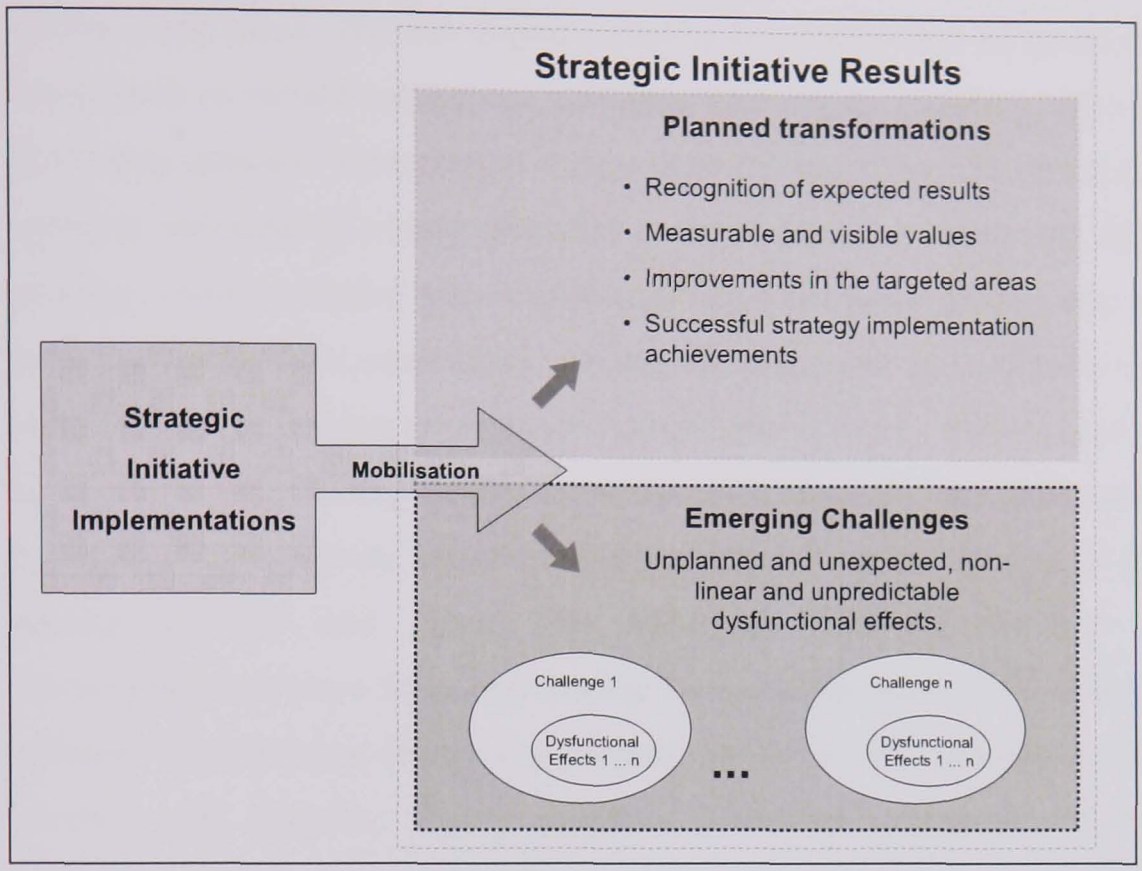
Furthermore, the decentralised organisational units faced the challenge of individuality. Various strategic initiatives had developed their own cultures, skills, approaches and processes over time and had to link their local priorities, agendas, and needs with the overall initiative expectations and objectives. In the context of an individual strategic initiative, various organisational units and other ongoing initiatives which interacted with the individual initiative were required to combine new approaches, skills and methodologies with their ongoing operations and activities (process of combination).

In the context of the strategic initiative case studies conducted, different types of challenges emerged from the drivers described. Those drivers are discussed in the following sub-sections.

#### 8.2.1.1 Formation of Challenges

Challenges arose from the strategic initiative implementation activities observed in the three in-depth case studies. All three strategic initiatives stimulated, through their implementation activities, different challenges, which in this study are defined as dysfunctional effects of the initiative related strategy implementation process. These challenges occurred alongside the expected and planned initiative results and expectations in so far as the results of a strategic initiative can be divided into two different groups. The first group reflects the planned transformation and includes the planned and utilized strategic initiative results and expectations relating to the company's strategic intent to implement its defined business strategies. The outcomes and results of this group are well-known to the management team of the company, and they reflect the implemented rationale of the strategic initiative, including the vision of the overall strategic initiative and the definition of initiative related objectives and goals. The dynamics and changes of this group are widely acknowledged by the company's different management teams, and they illustrate how the company is implementing its defined business strategies. In comparison, the second group of results is rather unexpected and less predictable. This group includes various upcoming challenges from which somewhat uncontrolled dysfunctional effects emerge, as illustrated in Figure 26.

Figure 26: Challenges and emerging dysfunctional effects.




The challenges observed are stages at which existing firm resources interact with new resources and fail to establish new and competitive resource combinations often described as new bundles of resources (Barney, 1991; Chatterjee and Wernerfelt, 1991; Peteraf, 1993). Instead of the strategic initiative's expected result of reconfiguring existing resource configurations, the initiative gives rise to problematic situations from which uncontrolled dysfunctional effects ensue. All three strategic initiatives stimulated different challenges, which can be classified into three different categories.

*(A) Challenges based on interactions between the strategic initiative and the organisational context*

*(B) Challenges based on interactions between ongoing strategic initiatives*

The first observed challenge can be summarised as a situation in which *organisational resistance and barriers against the ongoing strategic initiative (A)* activities and plans emerged. In detail, all three of the strategic initiatives experienced challenges in

overcoming organisational resistance and barriers against the ongoing initiative activities and plans. The Sun Sigma initiative faced situations of resistance raised by actors such as various executives, managers and project members, who impeded the Sun Sigma initiative's progress with their activities and plans. The CRM Convergence initiative encountered similar obstacles in that it aimed at improving the company's existing product-oriented sales capabilities and transforming them into solution and service-oriented sales capabilities. During the endeavour to transform existing sales capabilities, the situation arose where barriers and resistance from organisational units transformed the existing sales capabilities. Furthermore, the Balanced Scorecard initiative faced a similar situation of organisational resistance against the initiative related activities and plans. The Balanced Scorecard initiative specifically encountered resistance from challenging business situations and solidarity between different management teams and executives to protect individual business unit interests and agendas. Those situations generated organisational barriers and resistances against the Balanced Scorecard initiative. In summary, the first challenge was based on interactions with the firm's organisational context and can be characterised in terms of emerging barriers and resistance by organisational business units against the initiative related activities and plans.

The second challenge can be classified as *different reactions due to conflicting perspectives and misaligned business operations (A)* due to the ongoing activities and plans of the individual strategic initiative. The Sun Sigma initiative faced obstacles where organisational misinterpretations generated different challenging effects because of the complexities and challenges produced by different interpretations, expectations, and different supporting activities and decisions by the various actors involved. Sun Sigma became a heterogeneous synonym for actors as different as project teams, executives and decision makers, and line of business representatives. In detail, different perspectives emerged on the ongoing and planned Sun Sigma initiative activities and created different understandings on the Sun Sigma aims and topics. By extension, the CRM Convergence initiative was obstructed by de-centralised organisational structures and de-fragmented and misaligned business operations from which various challenging effects arose. The Balanced Scorecard

initiative experienced similar reactions from de-fragmented organisational structures and misaligned activities and ongoing operations and faced the challenge of different upcoming effects. In summary, the second observed challenge was based on interactions with the firm's organisational context and can be characterised in terms of different and sometimes controversial reactions from conflicting perspectives and misaligned business operations by different organisational business units and departments. Those controversial reactions generated various effects.

The third observed challenge can be defined as *challenging iterations and multiplier effects due to organisational and initiative related interactions (A)*. In this context, three different case studies are compared and similarities were identified. Firstly, the CRM Convergence initiative transformed the company's organisational context. This, in turn, affected the further development of the initiative by extending its scope (from local to global) and shifting its priorities (from three main business units to global sales organisation). This observation illustrates that the emerging challenges able to stimulate various critical effects comprised possible iterative characteristics which gave rise to further emerging challenges and additional unexpected effects. In comparison, similarities can be found within the initiative challenges arising from uncontrolled growth of Sun Sigma projects across the organisation (Sun Sigma project proliferations). This challenge emerged during the implementation phase of the Sun Sigma initiative, and it illustrates that, because of Sun Sigma-related initiative activities, uncontrolled proliferations of new Sun Sigma projects increased and produced new effects across the company as a multiplier of emerging challenges and new effects. Hence, findings illustrate that observed challenges emerge as tensions in the strategic initiative related implementation process and include iterative and multiplier characteristics from which new challenges and effects may emerge.

The fourth observed challenge can be described as *challenging dependencies between different ongoing strategic initiative goals and objectives (B)*. This challenge can be found in all three strategic initiative case studies. The Sun Sigma experienced different challenges where the initiative engaged with other ongoing strategic initiatives in new dependencies based on the initiative-individual goals and objectives,

with the consequence that challenges and effects evolved. The CRM Convergence initiative faced similar situations where emerging dependencies with other ongoing initiative goals and objectives created new challenges. Both strategic initiatives engaged and became engaged through other ongoing strategic initiatives in the complexities and challenges of emerging dependencies between individual initiative goals and objectives which in turn created challenging effects for the company.

The fifth observed challenge can be described as *challenging boundaries and barriers between ongoing strategic initiatives (B)*. The CRM Convergence and the Balanced Scorecard initiative faced barriers and boundaries raised by different ongoing initiatives which impeded both strategic initiatives from proceeding with their individual activities and plans. In detail, the CRM Convergence initiative created new customer metrics and success measures which were difficult for the Balanced Scorecard to change at a later stage. Furthermore, the Balanced Scorecard initiative faced the challenge of the emerging Sun Sigma euphoria and the requirement to be transformed into a Sun Sigma project, with the consequence that the Balanced Scorecard-related activities and plans slowed down and important milestones could not be reached in the expected time. Hence, this challenge illustrates how ongoing strategic initiatives created, with their activities, unexpected boundaries and barriers for other ongoing strategic initiatives.

The sixth observed challenge can be summarised as *de-fragmentations and inefficiencies between ongoing strategic initiatives (B)*. In this context, all three strategic initiatives faced the complexities of specific situations in which strategic execution inefficiencies, compliance challenges and conflicting perspectives between ongoing initiatives created challenges of strategic conflict between initiatives, with the consequence of emerging and critical effects for the company. The Sun Sigma initiative experienced compliance challenges between other strategic initiatives because of its aim to combine existing initiative related knowledge bases with new Sun Sigma-related knowledge base. The CRM Convergence initiative experienced conflicting perspectives and convergence dynamics between ongoing strategic initiatives from which challenges emerged, and the Balanced Scorecard initiative

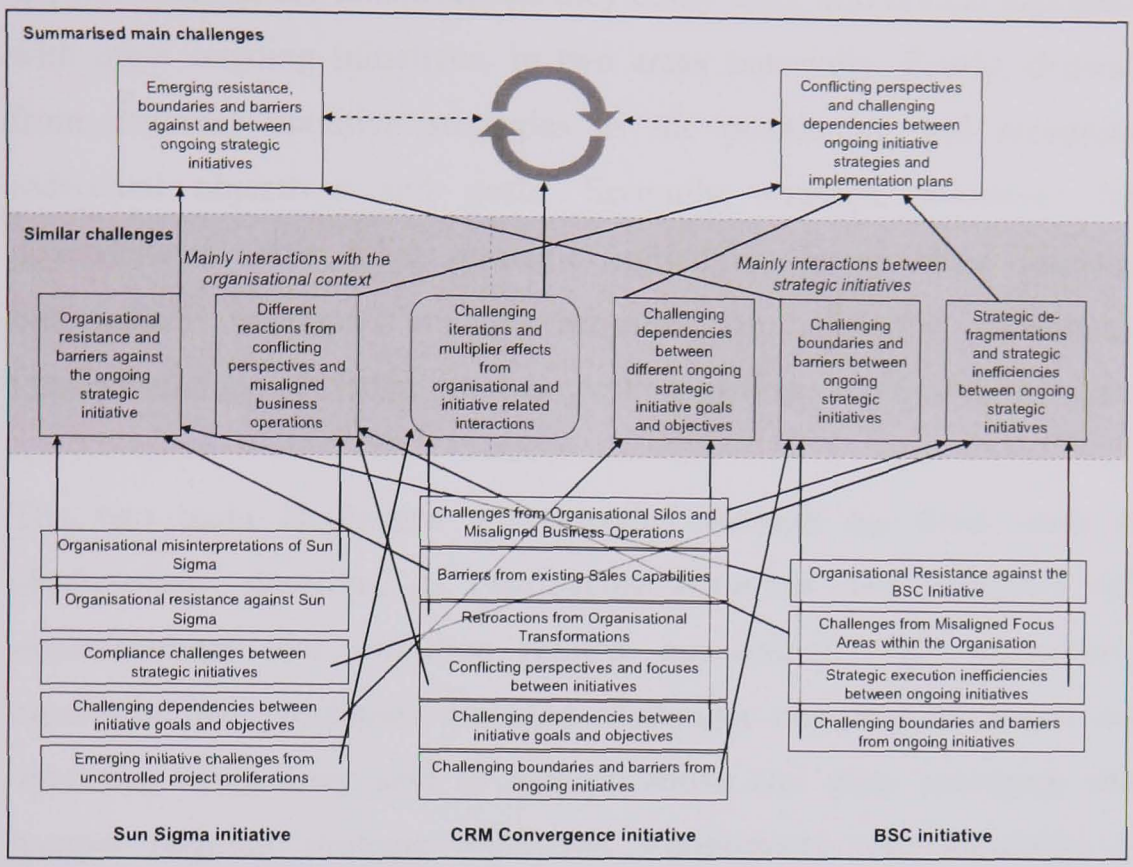
experienced inefficient overlaps between strategic initiatives, from which strategic threats emerged.

The foregoing analysis, definition and classification of the observed challenges by the three strategic initiative case studies lead to the next step: comparison and definition of the main challenges in the context of strategic initiative implementation activities. Furthermore, analysis of their characteristics, according to the theoretical concepts derived from the literature review of this study, is conducted in the next section.

#### 8.2.1.2 Characteristics of the Main Challenges identified

The discussion in the previous section summarised similarities on the basis of analysis and comparison of the strategic initiative related challenges (15 challenges) observed in the three in-depth case studies and the two different categories of challenges (A: Challenges based on interactions between the strategic initiative and the organisational context and B: Challenges based on interactions between ongoing strategic initiatives). The analysis and comparison of those similarities of the challenges from the three strategic initiative related case studies led to the final result, which highlights the three main challenges in the context of the strategic initiative case studies conducted, outlined in Figure 27.

Figure 27: Overview of the emerged challenges, based on the case studies.




The first main challenge was summarised and defined as *emerging resistance, boundaries and barriers against and between ongoing strategic initiatives*. This challenging situation emerges from both interactions due to strategic initiative interactions with the company's organisational context and from interactions between different strategic initiatives. The challenging situation comprises different forms of emerging and challenging resistances, boundaries and upcoming barriers against the ongoing strategic initiative. Or the strategic initiative facilitates blockages against other ongoing strategic initiatives and organisational units with tensions and complexities occurring because of the overall strategy implementation process. Both types include changes which somehow strongly deviate from existing capabilities, competencies and knowledge bases.

The second main challenge was defined as *conflicting perspectives and challenging dependencies between ongoing initiative strategies and implementation plans*. This challenging situation includes the problematic of different priorities, conflicting perspectives, misaligned agendas, individual interests and challenging dependencies

between different ongoing strategic initiatives. In detail, strategic initiative implementations are sensitive, and they easily enter into critical dependence relations with other ongoing initiatives, in two areas especially. Firstly, dependencies arise from different initiative strategies as the positioning and recognition of their individual objectives and goals. Secondly, strategic initiatives form difficult dependencies with other strategic initiatives during their implementation as unexpected overlaps among activities or different understandings and implementations of similar processes with sometimes inefficient outcomes.

The two main challenges are extended through the third main challenge or characteristic, described as *challenging iterations and multiplier effects due to organisational and initiative related interactions*. This characteristic reflects especially that previously emerged challenges comprise iterations and multiplier dynamics which may lead to multiplications and other emerging challenges and hamper ongoing strategic initiatives. Furthermore, this challenge is based on comparisons among strategic initiative interactions with the company's organisational context and other ongoing strategic initiatives. Therefore, this type of challenge acts more as a facilitator of the two main challenges by generating iterations and multipliers from existing challenging situations and emerging effects which may give rise to the new challenges and additional effects described in the empirical case study chapters (see retroactions from organisational transformations – CRM Convergence initiative, and emerging initiative challenges from uncontrolled project proliferations – Sun Sigma initiative).

In addition, analysing and comparing the strategic initiative characteristics (see Table 38) and the challenges emerged from the three strategic initiatives (see Figure 27) several interesting aspects evolve for future research projects within the area of strategic initiative implementation. Firstly, the Sun Sigma initiative stimulated the most challenges of the three strategic initiatives. Reasons may be found within the long implementation time (duration) and implementation approach. A de-centralised implementation approach of the Sun Sigma initiative stimulated a wide range of improvement projects which were not always fully aligned between their individual

implementation activities. Hence, a wider range of challenges and critical dependencies between ongoing initiatives and de-centralised improvement projects as part of the Sun Sigma initiative emerged in comparison to the CRM Convergence and Balanced Scorecard initiative. Secondly, the large target audience and wide range of improvement areas increased the challenges of misinterpreting the Sun Sigma objectives and created part wise strong organisational resistance against the Sun Sigma initiative in comparison to the two other observed strategic initiatives. Thirdly, the Balanced Scorecard initiative was the smallest initiative in terms of target audience and initiative size. Therefore, the intensity of interactions was moderate in comparison to the Sun Sigma initiative and the CRM Convergence initiative. However, each Balanced Scorecard stimulated interaction could lead to strong challenges for other ongoing initiatives as challenging boundaries and implementation inefficiencies (strategic execution inefficiencies). The reasons for this may be found within the centralised (top-down) implementation approach and the narrow-scaled initiative resource focus on Sun's management team. The close and intensive involvement of the firm's management team facilitated short decision processes, which sometimes strongly affected other ongoing initiatives. Fourthly, the autonomous (organisational integration) positioning of the Balanced Scorecard initiative provided the space to affect strongly the firm's organisational context and other ongoing initiative. In comparison, the CRM Convergence initiative where part wise integrated and a trade-off between a centralised and de-centralised approach, which leaded to a wider range of emerging and sometimes more moderate challenges due to their affect on other ongoing initiatives.

In summary and having emerged from strategic initiative related interactions, a challenge is a stage at which the company's knowledge creation processes facilitated through strategic initiative related drivers to create upcoming dysfunctional effects. In this context, two aspects relate to the stage of a challenging situation: firstly, the ambiguity of strategic initiative related interactions and expected outcomes (Khanna *et al.*, 2000; Kownatzki, 2002; Zott, 2003); secondly, the causal ambiguity of the RBV, as researchers has pointed out an ambiguity in the connections between actions and results. In this regard, managers and stakeholders are in general unable to

understand exactly what they are doing right, and whether their decisions will lead to the expected results (Lippman and Richard, 1982; Reed and Robert, 1990). Hence, the challenge arises from the ambiguous connections between initiative actions and results.

### 8.2.2 Consequences from the emerged Challenges – Dysfunctional Effects

The following section discusses in detail the consequences of the challenges observed between new and old resources and knowledge bases during the strategic initiative implementation process. In the context of this research project, dysfunctional effects arise from specific situations during the strategy implementation activities described and classified in the previous sections as initiative related implementation challenges. These dysfunctional effects can best be described as unexpected disorders and emerging threats for the entire company. In detail, dysfunctional effects are the unexpected dimension of transformational activities undertaken to renew and sustain a firm's competitive advantage in the context of strategic initiatives. The basic characteristics of dysfunctional effects can be classified into four different groups.

1. *Planned – Business Supportive Effects:* this group can be described as planned changes in existing resource structures in the context of strategic initiatives with valuable and business supportive outcomes.

2. *Unplanned – Business Supportive Effects:* this group of effects emerge in the context of strategic initiative activities; they are unplanned but nevertheless useful and business-supportive outcomes.

3. *Planned/Accepted – Business Destructive Effects:* this group of tensions and effects form a special group where destructive impacts of strategic initiatives on resources and knowledge base are partly accepted or "planned".

4. *Unplanned – Business Destructive Effects:* these effects are the destructive outcomes of strategic initiative activities. Moreover, this group includes resource transformation outcomes which emerge without being anticipated.

In general, the first group of effects are planned and business supportive effects which relate to a strategic initiative's objectives and goals. The initiative's stakeholders require these changes in relation to the strategic initiative implementation plans and activities. The second group of effects are unexpected but business supportive ones which constitute additional and valuable business outcomes for the firm: for example, the SBAP department managing the portfolio of the firm's strategic initiative was also affected by various CRM Convergence consolidations. These iterations, described as retroactions, partly increased the efficiencies of further initiative operations. The third group of planned or accepted business destructive effects comprises resource effects where strategic initiative activities give rise to useless and business-destructive outcomes, for example "political games" and vindications of ROSS. ROSS was used in various ways to justify new investments and resource (re-)allocations to justify new activities, even ones contrary to the overall company objectives and goals. The last group of unplanned and business destructive effects comprises ones which are business destructive but unplanned. This group formed the most challenging and undiscovered area in the context of the strategic initiative related implementation activities. Overall, the first two groups generally comprise changes defined in the strategy and expected by the company to be implemented and realised through the launched initiative. This was the regular and commonly accepted transformation realised through the firm's strategic initiatives. However, the strategy implementation process in the context of strategic initiatives included the danger of various tensions which might turn into dysfunctional effects with the business destructive outcomes for the company reflected by the third and fourth group. Therefore, strategic initiatives may always create two types of effect. The first type is expected or sometimes unexpected, and it produces business supportive outcomes which are commonly agreed by the company and related key stakeholders. Effects of the second type are dysfunctional and often unexpected by the company and related key stakeholders. These dysfunctional effects create business destructive outcomes across the entire company in the context of strategic initiatives.

According to the results of the case study analysis and case comparison, five different groups of dysfunctional effects can be identified and described. The first group of

dysfunctional effects can be summarised as *Drifting Targets* of strategic initiative related implementation activities. Drifting targets include the problem where initiative related activities lead to a drift in strategic initiative objectives and goals. In this regard, the affected initiative faces the problem where the initiative resources and implementation structures do not match with the new and drifting objectives and goals. The affected strategic initiative is at risk of losing the control and capability to fulfil the new and drifting objectives and goals. Furthermore, the strategic initiatives become increasingly stretched between the original goals and objectives and the new ones, with the consequences of sub-optimal supported and misaligned initiative related and invested resources and structures.

Table 40: Drifting targets per strategic initiative.

| **Drifting Targets** | **Dysfunctional Effects** |
|---|---|
| Sun Sigma Initiative: | 1, 11 |
| CRM Convergence Initiative: | 17, 20, 23, 24, 27 |
| BSC Initiative: | 37, 38, 39 |

The following example illustrates the characteristics of drifting targets, giving the numbers of the dysfunctional effects relating to the effects observed in the three empirical strategic initiative case studies. For example, effect number 39 occurred in the context of the BSC initiative, which was aimed at improving overall strategy execution performance by reviewing individual initiative goals and their strategic relevance to the company's objectives and goals. Initiatives which did not provide strong support for the new company objectives and goals were terminated, and the resources were reallocated to other initiatives with stronger strategic relevance. However, after a period of initiative consolidations, strategic initiatives continuously adapted their objectives and goals to the firm's overall objectives in order to maintain their relevance and justification. Hence, strategic initiative objectives and goals started to drift. The consequence was that different initiatives targeted similar improvement areas. These situations generated higher strategic implementation costs as more and different resources were needed for different ongoing initiatives to fulfil the new targets. Furthermore, this situation included overlaps among initiative-

specific activities, and resource priorities were increasingly difficult to set for the firm's management teams, which eventually reduced the overall effectiveness of the firm's strategy execution process against the BSC initiative's purpose of improving the firm's overall strategy execution process. The BSC initiative related activities led to drifts in various ongoing strategic initiative targets.

The second group of dysfunctional effect consists of *Emerging Resource Lacks*. This group of effects relates to the challenge where strategic initiative related activities gave rise to additional resource needs which could not be covered by the firm. Therefore, resource lacks emerged and affected the progress of various strategy implementation activities and plans.

Table 41: Emerging resource lacks per strategic initiative.

| Drifting Targets | Dysfunctional Effects |
|---|---|
| Sun Sigma Initiative: | 5, 6 |
| CRM Convergence Initiative: | 16, 25, 26 |
| BSC Initiative: | 40, 42 |

The following example illustrates the notion of emerging resource lack. Effect number 16 occurred in the context of the CRM Convergence initiative, whose purpose was to integrate and align different organisational business units with the defined CRM goals and objectives. Every organisational unit should become more customer oriented and should increase its customer focus within its daily business operations. In this context, the CRM Convergence initiative transformation activities encountered different levels of knowledge and capabilities within the different organisational business units. Furthermore, each business unit had different levels of decision power on the planned CRM Convergence initiatives. This situation created different perspectives and interests within each business unit, producing additional discussions on the initiative plans and slowing down the overall implementation process. Hence, to fulfil the defined CRM Convergence initiative timelines and to avoid delays, the initiative was forced to speed up some of its activities, which led to requests for additional and unbudgeted initiative resources and created different resource lacks

within the CRM Convergence initiative. This example illustrates how the CRM Convergence initiative's implementation was faced by different interests and agendas in different business units which led to resource lacks within the initiative.

The third group of dysfunctional effects are summarised as the *Neglect of Available Resources*. The neglect of available resources occurred through strategic initiative related activities, with the consequence that the utilisation of resources decreased and slowed down the strategic initiative related implementation process.

Table 42: Neglect of available resources per strategic initiative.

| **Drifting Targets** | **Dysfunctional Effects** |
|---|---|
| Sun Sigma Initiative: | 3, 4, 10 |
| CRM Convergence Initiative: | 18, 19, 22, 30 |
| BSC Initiative: | 35, 36 |

The following example illustrates the characteristics of the neglect of available firm resources. Effect number 3 occurred in the context of the Sun Sigma initiative intended to roll out the Sun Sigma concept to the wider organisation, including different customer service teams like the firm's customer troubleshooting and support teams. In this regard, the Sun Sigma initiative introduced standardised approaches, methodologies and templates to solve emerging customer problem fields. Nevertheless, the Sun Sigma standardisations decreased utilisation of the firm's strengths and its existing abilities to solve upcoming customer problems unconventionally. Employees started to shift their result-driven activities to Sun Sigma-oriented and template-driven activities. This example illustrates how existing resources like unconventional problem-solving skills and capabilities became neglected through Sun Sigma related roll-out and implementation of standardised methods and approaches.

The fourth group of dysfunctional effects comprises *Operational Complexities*. In the context of the strategic initiative case studies, strategic initiative related activities gave rise to additional operational complexities. These unexpected operational

complexities affected the performance of the company's different ongoing strategic initiative activities and ongoing business operations.

Table 43: Operational complexities per strategic initiative.

| Drifting Targets | Dysfunctional Effects |
|---|---|
| Sun Sigma Initiative: | 2, 7, 8, 9 |
| CRM Convergence Initiative: | 28, 29 |
| BSC Initiative: | 31, 32, 33, 34, 41 |

The following example illustrates the characteristics of the operational complexities observed. Effect number 28 occurred in the context of the CRM Convergence initiative intended to roll out new customer processes, including new roles and responsibilities and customer success metrics. In this regard, the initiative faced similar but conflicting activities within other ongoing initiatives, such as the partner-relation and the solution-selling initiatives. All three initiatives comprised controversial activities. The partner-relation initiative pushed product-oriented relationship management business processes and operations, which conflicted with the CRM Convergence's purpose of establishing a customer and solution oriented relationship management approach. Additionally, the Solution Selling initiative aimed at creating new customer solutions, which was contrary to the Partner Relation initiative's plans. These conflicting activities generated operational complexities for the different initiatives in fulfilling their strategic objectives because the firm's customer oriented teams became confused and used those controversial issues to push their individual business unit's agendas and interests.

The fifth and last group comprised *Problem Multipliers*, which constitute a specific category of dysfunctional effects. This group includes dysfunctional effects such as effect iterations and multiplications. In detail, emerging dysfunctional effects may sometimes lead to new challenges and dysfunctional effects which generate further challenges and complexities for the entire company, including ongoing strategic initiative activities.

Table 44: Problem multipliers.

| Drifting Targets | Dysfunctional Effects |
|---|---|
| Sun Sigma Initiative: | 12, 13, 14, 15 |
| CRM Convergence Initiative: | 21 |
| BSC Initiative: | - |

The following example illustrates the characteristics of the operational complexities observed. Effect number 13 occurred in the context of the Sun Sigma initiative undertaken to facilitate the launch of various new Sun Sigma projects in various organisational units across the globe. In this regard, the Sun Sigma projects increased greatly, with the consequence that after two years the firm had over 3000 such projects registered and ongoing. This uncontrolled proliferation of Sun Sigma projects stretched Sun's scarce resources and increased overheads within various organisational units. Furthermore, CAO became increasingly a support and administrative unit for new Sun Sigma projects instead of providing Sun Sigma expertise to the wider organisation. This situation escalated as more and more Sun Sigma projects were launched at the same time as administrative and bureaucratic inefficiencies within CAO increased. Hence, increasing resources was required to implement the Sun Sigma objectives and goals because of the new Sun Sigma project demands and the growing CAO organisation. In summary, this example illustrates how uncontrolled Sun Sigma project proliferations increased the overall company's need to maintain the Sun Sigma implementation activities, and they multiplied inefficiencies within different business processes and operations. New Sun Sigma projects stimulated further interactions with other ongoing initiatives and organisational units and multiplied the likelihood of new dysfunctional effects.

The dysfunctional effects observed form the basis for the classification of the five different groups of dysfunctional effects: *Drifting Targets, Emerging Resource Lacks, Neglect of Available Resources, Operational Complexities,* and *Problem Multipliers.* The three case studies could only identify Problem Multipliers within the Sun Sigma and CRM Convergence initiatives. The BSC initiative did not provide any evidence of

dysfunctional effects relating to the group of Problem Multipliers. Therefore, Problem Multipliers may reflect optional characteristics, because not every initiative related challenge and emerging dysfunctional effect generates further dysfunctional effects and multiplications of challenging situations. The five different groups of dysfunctional effects are compared and defined in Figure 28.

Figure 28: Overview and definition of the dysfunctional effects observed.

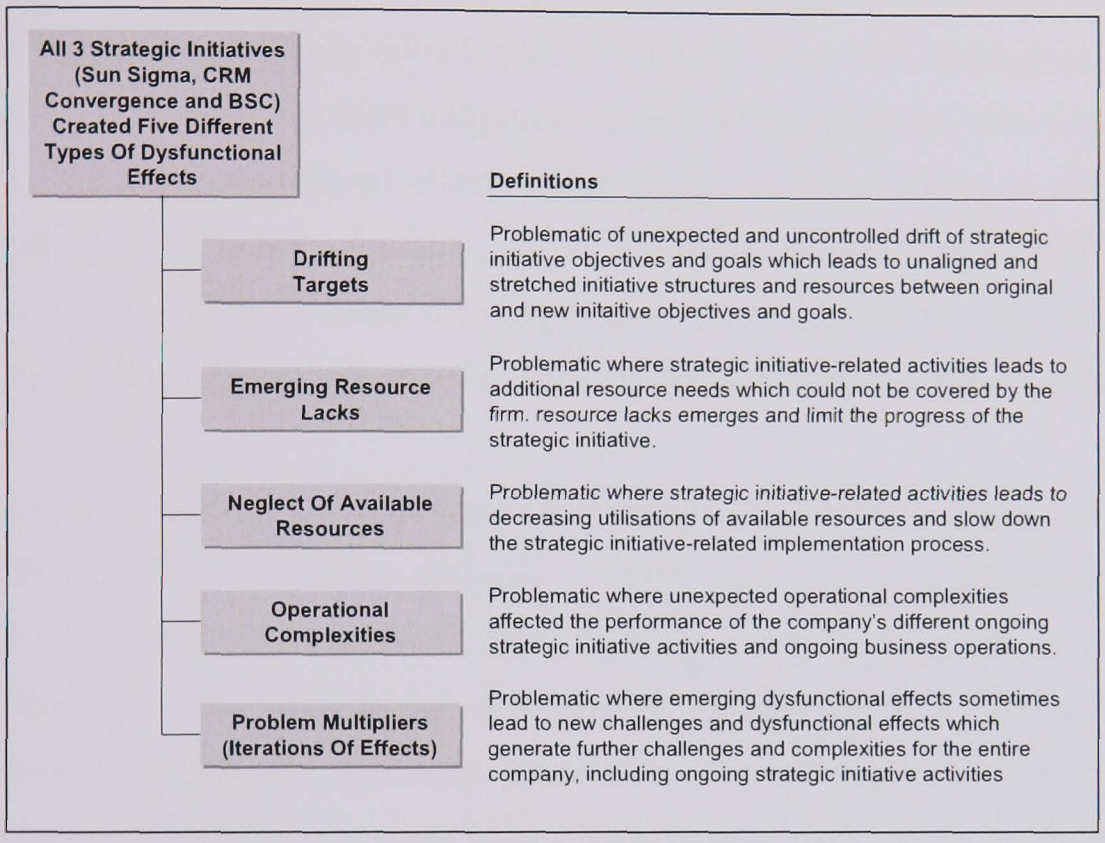



Figure 28 illustrates the dysfunctional effects groups identified across the three different strategic initiative case studies. The five different dysfunctional effects groups emerged from comparison among the three different strategic initiatives and their initiative-specific dysfunctional effects. The observed effects highlight that ongoing strategic initiatives largely reduced the overall effectiveness and utilisation of existing firm resources and stimulated an increase in operational complexities across the company. Furthermore, the dysfunctional effects observed closely related to the complexities of transforming and extending the company's current knowledge base by re-configuring existing resources and adding new resources to existing configurations.

The consequences of the resource challenges and inefficiencies observed in relation to the dysfunctional effects affected the company in four main areas. Firstly,

dysfunctional effects of ongoing strategic initiative activities and transformations led to more resources needs over time, with the consequence that the company was forced to invest and allocate more resources to current initiative operations than originally expected and planned. Secondly, some of the emerging effects affected the overall strategic initiative's progress and reduced the capacity to deliver the expected initiative related transformations on time, which reduced the relevance of the initiative related strategy implementation processes. Thirdly, dysfunctional effects emerging from ongoing strategic initiative activities led to an overall decrease in the company's current resource and asset utilisations. Existing firm resources were neglected because of various dysfunctional effects which hampered the progress of different strategic initiative activities. Fourthly, value creations expected from different strategic initiative implementations did not produce the expected results and values because of the business destructive characteristics of the dysfunctional effects that emerged.

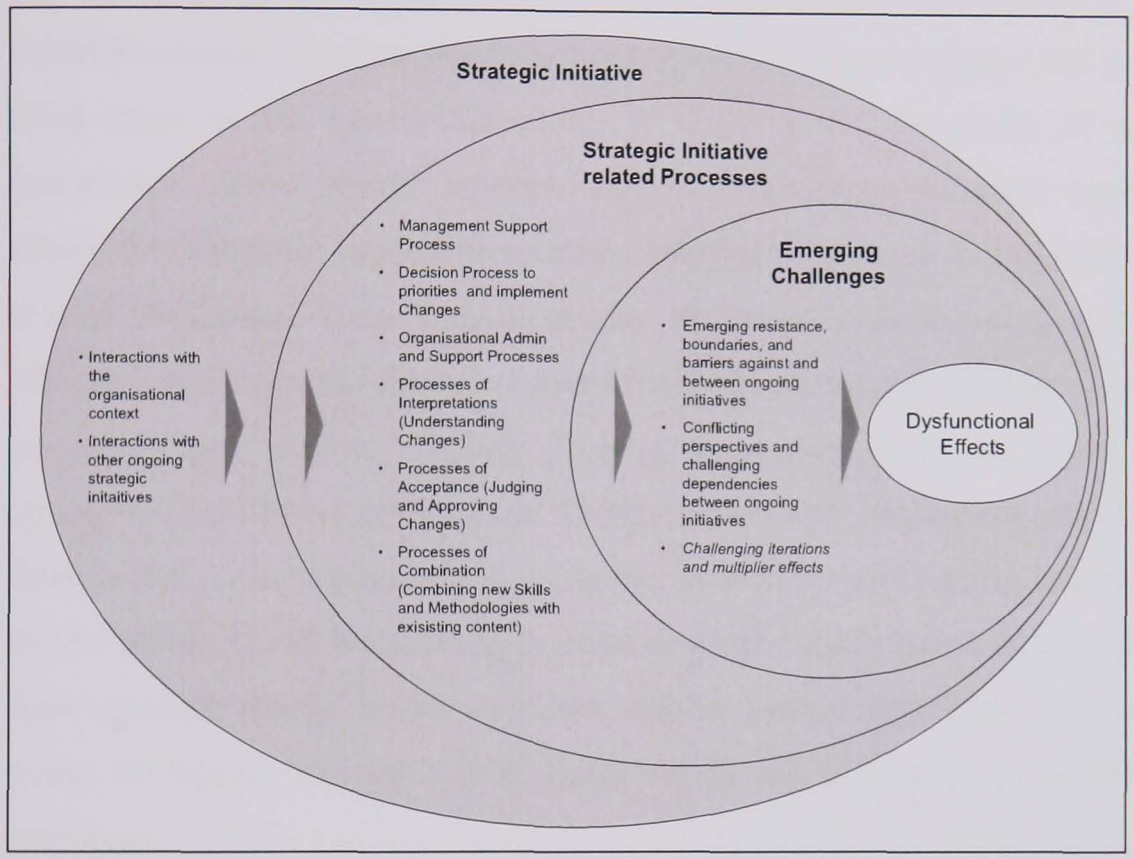
These consequences corroborate the assumption of various strategists (Porter, 1979) that threats to s firm's sustainable competitive advantage may not only arise from forces external to it (Porter, 1980; Mintzberg and Waters, 1985; Volberda, 2004). Moreover, the analysis and definition of strategic initiative related dysfunctional effects underlines the strategic importance of avoiding the creation of dysfunctional effects, as those effects arise from a destructive knowledge base which grows within the firm's knowledge base once destructive grounds become established through strategic initiative related implementation and transformation processes.

### 8.2.3 Emerging Concept of Strategic Initiative related Dysfunctions

Managing and improving the strategy implementation and transformation process in the context of strategic initiatives starts with the understanding of emerging interactions. The case studies identified different interactions between a strategic initiative and the firm's organisational context and different interactions between ongoing strategic initiatives. These interactions activated strategic initiative implementation and transformation processes by connecting the firm's resources, knowledge base, and the activation of firm-specific knowledge creation processes. Furthermore, during those periods, different strategic initiative related implementation

and transformation activities gave rise to, besides their expected results, challenging situations – defined as challenges in this study – from which various dysfunctional effects arose to challenge the entire strategic initiative related strategy making process. The three strategic initiative case studies, and analysis of the data collected, produced the following conceptualization of strategic initiative related dysfunctions.

Figure 29: Strategic Initiative related challenges and emerging dysfunctions.




Strategic initiative interactions can be defined as the first stage and the starting point of strategic initiative related implementation activities which lead to interactions between the initiative's emerging resources and knowledge base and existing firm or other ongoing strategic initiative's resources and distinct knowledge base. Those interactions reflect new connections between old and new firm resources; they connect idiosyncratic and emerging knowledge bases; and they activate firm-specific knowledge creation processes. This gives rise to the second stage of strategic initiative related transformation. This stage involves the creation and facilitation of initiative-specific dynamic capabilities. Six different types of such dynamic capabilities have been observed by this study: *management and support processes, decision processes to prioritise and implement changes, organisational*

*administration and support processes, processes of interpretation (understanding changes), processes of acceptance (judging and approving changes), and processes of combination (combining new skills and methodologies with existing content).* These processes stimulated two possible transformational directions for initiative related transformation activities. The first was the planned, commonly agreed and finally expected results of the strategic initiative-specific transformations. This direction is the reason why a strategic initiative is launched by a company. The second transformational direction was rather unexpected and problematic and constitutes the third stage in the conceptualization. It involves the formation of dysfunctional knowledge, from which emerge, not value-creating dynamic capabilities but destructive dynamic capability-specific situations – defined in this study as initiative related challenges. These transformations generated various emerging dysfunctional effects, which can be classified into five different groups in light of the strategic initiative case studies: *Drifting Targets, Emerging Resource Lacks, Neglect of Available Resources, Operational Complexities, and Multipliers*. All five types of dysfunctional effect affected the company, as well as the ongoing strategic initiatives in four different and business destructive areas: the challenge to invest more resources than planned; delays in the expected results; missed opportunities and decreasing value of results; and an overall reduction in the utilisation of existing company resources.

In summary, three different aspects characterise the emerging concept of strategic initiative related dysfunctions. Firstly, dysfunctional effects can evolve over time alongside the intended changes, and transformation occurs in the strategic initiative related activities. Dysfunctional effects do not *per se* emerge in every strategic initiative related implementation activity. Secondly, dysfunctional effects arise from initiative related challenges which are the result of different initiative related drivers – driving and mobilising the performance of different firm-specific processes and routines, with sometimes problematic outcomes classified as dysfunctional effects. Thirdly, the baselines of emerging challenges are facilitated by different forms of strategic initiative related dysfunctional knowledge, based on different interactions with the firm's organisational context and other ongoing initiatives. In this context, all

strategic initiative related interactions, emerging challenges and dysfunctional effects are strategic-initiative specific. Every strategic initiative creates its own knowledge or dysfunctional knowledge base which may be multiplied through further combinations and transformations with the firm's or other ongoing strategic initiative related resources and knowledge bases.

The following section compares the findings from the case studies in the perspective with the main bodies of literature selected.

## 8.3 Theoretical Reflection and Analysis of the Findings

This section discusses the results of the strategic initiative analysis conducted in the previous sections, doing so from the perspective of the main bodies of literature selected in relation to answer the derived research questions. Answers on how strategic initiatives affect existing resource and knowledge base in the context of renewing a firm's competitive advantage are discussed and outlined in section 8.3.1, 8.3.2, 8.3.3 and 8.3.4.

In particular, the debate on how strategic initiative interact with the firm's organisational context and other ongoing strategic initiatives are discussed mainly in the section 8.3.1 and 8.3.3 in the context of the main bodies of literature selected, especially strategic initiative concepts, the resource based theory and the knowledge based theory. The theoretical discussion starts with the debate on strategic initiative related interactions in the perspective of the strategic initiative concept and the resource based theory. The discussion starts with how strategic initiative related interactions facilitate the connection of new and existing firm resources to establish new sources of competitive advantage, and with the problematic aspects of the aim to connect new and existing firm resources through strategic initiative interactions. Furthermore section 8.3.1 and 8.3.3 describes how the observed challenges emerged from strategic initiative related interactions can be understood through the different main bodies of literature.

Section 8.3.2 provides answers on the drivers of the observed challenges and leads to the debate of linking the strategic initiative concept to the dynamic capability theory. The discussion extends the main bodies of literature through a more dynamic and process-oriented perspective: theoretical reflection on the role and value of the identified strategic initiative related dynamic capabilities in the context of the case studies conducted.

In addition, section 8.3.3 extends the discussion on strategic initiative related interactions and their potential challenges by linking the strategic initiative concept to the knowledge based theory. In detail, in the context of the knowledge based theory section 8.3.3 focuses the discussion on the concept of strategic initiative related knowledge bases and especially on how firm and strategic initiative specific knowledge bases are affected by ongoing initiatives. Furthermore, the discussion in the context of the knowledge based theory narrows the focus on the strategic initiative related knowledge creation process in reflecting on the interactions observed between a strategic initiative and the firm's organisational context, and interactions between a strategic initiative and other ongoing strategic initiatives. Finally, the theoretical reflections in section 8.3.4 summarise the discussion of the challenges that emerged from strategic initiative implementation activities and their consequences – defined as dysfunctional effects – by considering the main theories in the literature selected.

### 8.3.1 Strategic Initiative Interactions in the context of the RBV

The following section discusses the phenomenon of strategic initiative related interactions mainly in the context of the strategic initiative concept and resource based theory. The discussion of this section focuses on how strategic initiative related interactions facilitate the configuration of new resource bundles to establish new sources of competitive advantage and which kind of problematic aspects concern the aim of connecting new and existing firm resources through strategic initiative interactions.

The strategic initiative related interactions observed highlighted two challenging aspects to successful transformations of a firm's competitive advantage, in the context

of the strategic initiative concept. Firstly, strategic initiatives comprise a certain degree of autonomous behaviour which constantly surrounds management teams and stakeholders related to the initiative with ambiguity (Khanna *et al.*, 2000; Kownatzki, 2002; Zott, 2003). This aspect of ambiguity concerns the environment of strategic initiative related interactions, as in periods when information is missing or possible outcomes are difficult to foresee. In relation to the three empirical strategic initiative case studies conducted, and according to the strategic initiative literature, many strategic initiatives – like the three discussed here – enter uncharted territory. Therefore initiatives are difficult to plan and control, like a journey with limited forecast opportunities and unexpected outcomes (McGrath, 2001; Wielemaker, 2003; Lechner *et al.*, 2003). Hence strategic initiative related interactions comprise at the beginning of their evolution aspects of ambiguity in achieving the expected results. By comparison, the causal ambiguity in the perspective of the resource based theory is an ambiguity in the connections between actions and results. In this regard, managers and stakeholders are in general unable to understand exactly what they are doing right, and whether their decisions will lead to the expected results (Lippman and Richard, 1982; Reed and Robert, 1990).

Secondly, strategic initiative related interactions raise one of the key problems for strategists. All rent-generating competitive advantages will erode over time, and the purpose of strategic initiatives is to manage transformation of existing firm sources of competitive advantage by replacing or changing those resources and capabilities which are no longer able to yield rent (Vollmann, 1996; Wielemaker *et al.*, 2001). These perspectives lead to the assumption that strategic initiative related interactions are the first step in transforming existing firm resources and knowledge base which are no longer able to yield rent. Nevertheless, it is difficult to predict the outcomes of specific initiative related interactions because 'strategic initiative' includes Bargeman's (1988) concept of retrospective rationalism, where competitive advantage are only recognized retrospectively after a strategic initiative has been launched and executed. In the context of the observed strategic initiative interactions with the firm's organisational context and other ongoing strategic initiatives, it was difficult for the firm's management team to determine at the outset whether those emerging

interactions would lead to successful implementations and whether the strategic initiative would create new sources of competitive advantage. This may be one of the reasons why the theoretical concept of 'strategic initiative' includes aspects of continuous ambiguity – identified in this study as unpredictable consequences of upcoming interactions. In this regard, the assumption emerges that strategic initiative related interactions are ambiguous at the beginning and do not necessarily support the creation of new sources of competitive advantage. Hence, those interactions potentially undermine the ability of strategic initiative related activities to transform a firm's sources of competitive advantage (Daft and Weick, 1984; Dunbar and Ahlstrom, 1995; Kanter, 1999; Volberda, 2004).

Furthermore, within the resource based theory, strategic initiative related interactions link with Black's (1994) concept of "cogency relationships", in that resources are surrounded by various kinds of relationships which connect and establish the firm's idiosyncratic bundles of resources (Barney, 1991; Peteraf, 1993; Black and Boal, 1994). The observed strategic initiative related interactions can be interpreted as upcoming relations between existing firm resources and new resources for the strategic initiative to establish new bundles of resources. Hence, in the context of the resource based theory, the observed interactions constitute the first step in creating new bundles of resources by connecting established firm resources with new ones transformed and deployed through strategic initiative implementation actions. Furthermore, emerging bundles of resources should comprise specific attributes which are valuable, rare, inimitable and not substitutable (Teece, 1982; Barney, 1991). According to the three empirical case studies conducted, these attributes can be achieved through two different types of relations between new and old firm resources. Firstly, through three different interactions between the strategic initiative and the firm's organisational context, and, secondly, through five different interactions between the strategic initiative and other ongoing initiatives, according to the interaction types, classified in Figure 25. In this regard, the interactions identified by the case studies included connections between different types of resources, especially intangible assets and capabilities, as the firm's organisational processes and individual

knowledge base (Wernerfelt, 1984; Prahalad and Hamel, 1990; Amit and Schoemaker, 1993; Peteraf and Barney, 2003).

Nevertheless, the static nature of the RBV makes it difficult to apply the resource based theory to the dynamic perspective of emerging interactions in the context of the strategic initiative implementation process. The RBV may aid analysis of static situations in strategic initiative related implementation processes. If in such situations new resource combinations emerge with the qualities of being valuable, rare, inimitable and not substitutable, the RBV can help with classification of the new resource combinations as future sources of the firm's competitive advantage (Teece, 1982; Barney, 1991). However, the theory does not deal with the dynamic process perspective of managing and reshaping the firm's competitive advantage. New resource combinations may, within specific implementation stages of the strategic initiative, reflect qualities which qualify the new resource combination as a future source of the firm's competitive advantage. However, those qualities may erode in later strategic initiative related implementation stages.

In short, the strategic initiative related interactions observed are emerging connections between existing and new resources of the firm and the sources of new resource combinations and emerging challenges for the strategic initiative related strategy implementation process. Moreover, the strategic initiative related interactions yield a new concept and the opportunity to identify, create, or facilitate a firm's new bundles of resources with which to establish new sources of competitive advantage. In this regard, the dynamic capability theory and the knowledge based theory extend the theoretical discussion of the three empirical strategic initiative case studies findings with a more dynamic and process-oriented perspective.

### 8.3.2 The Role and Value of Strategic Initiative related Dynamic Capabilities

The following section focuses on the role and value of the identified strategic initiative related dynamic capabilities in the context of the case studies conducted. The first part of the discussion compares the identified initiative related drivers with the theoretical concept of dynamic capabilities. The next part of the discussion

focuses on the role of the drivers identified in the context of renewing a firm's sources of competitive advantage. The last part of the debate deals with the value of the drivers identified and relative challenges in facilitating the renewal process of a firm's sources of competitive advantage.

Interactions among strategic initiatives started knowledge creation processes and created – alongside the expected initiative results – various challenges. Those initiative results, and especially the emerging challenges, were stimulated by strategic initiative related drivers with the consequence of dysfunctional effects. Relating similarities to the concept of dynamic capabilities, the observed drivers were strategic initiative related processes that used resources to integrate, recombine, gain and release resources to establish new sources of competitive advantage (Amit and Schoemaker, 1993; Eisenhardt and Martin, 2000; Winter, 2003). In addition, in accordance with Amit and Schoemaker's (1993) dynamic capability concept, the drivers observed enabled the firm's strategic initiative capacities to deploy resources.

Furthermore, the drivers were information-based, tangible or intangible processes that were strategic initiative-specific and were facilitated over time through emerging interactions between a strategic initiative and the firm's organisational context or between ongoing initiatives or through strategic initiative-individual implementation activities (Amit and Schoemaker, 1993). Therefore, six strategic initiative related drivers are identified and outlined in the following:

- *a Management Support Process,*
- *a Decision Process to prioritise and implement changes,*
- *an Organisational Administration and Support Process,*
- *a Process of Interpretation,*
- *a Process of Acceptance, and*
- *a Process of Combination.*

These drivers can be defined as strategic initiative related dynamic capabilities which are necessary for successful strategic initiative implementations. Furthermore, they

stand for initiative-specific processes which are similar to dynamic capabilities. Hence, those initiative related processes are dynamic capabilities, and they are linked to the strategic initiative related implementation activities and their success.

The analysis and comparison of the drivers observed within the three strategic initiative case studies led to their definitions (see previous Tables) and the conclusion that the initiative specific processes observed are similar to the concept and definition of dynamic capabilities. However, the dynamic capabilities observed were not *per se* sources of competitive advantage; instead, the value of the emerging dynamic capabilities related to their capacity to enable the observed strategic initiative to improve the firm's existing resource configurations, in accordance with Eisenhardt and Martin's (2000) concept of dynamic capabilities.

According to the three case studies, before executives started to support various changes they judged and approved those changes during the strategic initiative implementation activities. These processes relate closely to the concept of sense making (Drazin *et al.*, 1999; Crossan *et al.*, 1999), according to which the knowledge creation process consists of intuiting, interpreting, integrating, and institutionalising the emerging knowledge. Therefore, the next assumption is that the observed strategic initiative related dynamic capability facilitated the transformation of specific knowledge bases of the firm and other ongoing initiatives. This assumption is supported by the findings where strategic initiatives create their own knowledge base over time through initiative specific dynamic capabilities.

Those dynamic capabilities can also affect other knowledge bases from ongoing initiatives on the basis of previously established interactions which create connections between different initiative specific knowledge bases. Another example from the strategic initiative case studies can help illustrate the influence of strategic initiative related dynamic capabilities on other ongoing initiative knowledge bases. The Sun Sigma initiative related dynamic capability activated the company's management support processes for various initiative plans and activities. These included the activation of different administrative and management processes for the initiatives, for

example by allocating and re-allocating experts from decentralised business to ongoing Sun Sigma activities. Furthermore, the decentralised organisational units faced the challenge of individuality. Various strategic initiatives had developed their own cultures, skills, approaches and processes over time and had to link their local priorities, agendas, and needs with the overall Sun Sigma initiative expectations and objectives.

In the context of an individual strategic initiative, various organisational units and other ongoing initiatives which interacted with the Sun Sigma initiative were required to combine new approaches, skills and methodologies with their ongoing operations and activities (process of combination). The influence exerted by the Sun Sigma initiative on other ongoing initiatives was not always successful. Therefore, in analysing, comparing and discussing the dynamic capability concept with the processes analysed, several aspects can be summarised.

Firstly, the processes analysed are similar to Teece et al.'s (1997) dynamic capability theory of managerial and organisational processes. In this perspective, dynamic capabilities are complementary assets of the firm and are tied to managerial beliefs, analogously to Tripas and Gavetti's (2000) notion of dynamic capabilities as managerial beliefs and cognitions. Furthermore, the observed strategic initiative related dynamic capabilities related to Van de Ven et al.'s (1999) study, where dynamic capabilities play an important role in managing the stages of change. In this context, Leonard-Barton's (1992) concept of core capabilities and core rigidities could be applied to strategic initiative related implementation and transformation activities. If those activities drifted too far from the firm's existing core capabilities, the strategic initiative faced challenges, because at a certain point the dynamic capabilities involved became traps or rigidities. From the perspective of the knowledge based theory, the processes identified related in part to Verona and Ravasi's (2003) concept of continuous innovation, and in part to Lawson and Samson's (2001) concept of innovation management. New transformations were started by means of different strategic initiatives to change the way in which the company had been doing business in the past. Overall, the strategic initiative related

and specific dynamic capabilities observed included marked elements of organisational and strategic decision-making, resource allocation and customer related processes, which received increasing attention from the strategic initiatives observed, and involved management teams (Eisenhardt and Martin, 2000; Griffith and Harvey, 2001; Helfat and Peteraf, 2003; Rindova and Taylor, 2003; Ethiraj *et al.*, 2005).

Moreover, all the processes identified and described related to the strategic initiative's idiosyncratic knowledge base and played an important role in the success of strategic initiative implementation activities. However, besides their ability to facilitate the renewal processes of firm resources to establish new and competitive bundles of firm resources, dynamic capabilities are improvisational and dissipative processes, meaning that they require constant energy to stay on track – if they have too little structure, they may easily slide to the edge of chaos, according to the descriptions of various scholars (Griffith and Harvey, 2001; Ethiraj *et al.*, 2005). This characteristic implies a risk for firms implementing their strategies through strategic initiatives: on the one hand, strategic initiative related dynamic capabilities are necessary for successful implementations; on the other, they may create additional complexities and challenges for the firm's organisational context and other ongoing initiatives. In the context of the strategic initiative case studies conducted, different challenges and complexities were observed and classified into different types of emerging challenges with the consequences of various dysfunctional effects. This aspects leads to the next theoretical discussion from understanding the role of initiative related dynamic capabilities to understanding of the value of those dynamic capabilities.

Dynamic capabilities play an important role in the creation of challenges and the consequences of emerging dysfunctional effects. According to Eisenhardt and Martin (2000), dynamic capabilities reflect four main processes through which resource manipulations are facilitated across the firm to establish new sources of competitive advantage. Those main processes reflect the value and ability of dynamic capabilities to facilitate the renewal of a firm's sources of competitive advantage. Dynamic capabilities are not *per se* valuable in renewing a firm's sources of competitive advantage. Their ability to manipulate idiosyncratic resources to establish new

sources of competitive advantage is the core value of strategic initiative related dynamic capabilities. Table 45 compares the strategic initiative related dynamic capabilities identified in this study with the core functions of dynamic capabilities recognised in the academic literature (Amit and Schoemaker, 1993; Teece *et al.*, 1997; Eisenhardt and Martin, 2000; Winter, 2003).

Table 45: Mapping the identified dynamic capabilities to the recognised core functions.

| **Resource Manipulations in the Academic Literature** | **Identified Dynamic Capabilities in this Study, in comparison with the Academic Literature** |
|---|---|
| A. Resource Creation | • Management Support Processes (D): Resource Release<br>• Decision Processes to prioritise and implement changes (A): Resource Creation |
| B. Resource Integration | • Organisational Administration and Support Processes (D): Resource Release |
| C. Resource Re-Combination | • Process of Interpretation (B): Resource Integration |
| D. Resource Releases | • Process of Acceptance (B): Resource Integration<br>• Process of Combination (C): Resource Re-Combination |

The table highlights similarities between the processes identified as playing a key role by the three strategic initiative case studies challenges and the key dynamic capability processes described in the academic literature (Mitchell *et al.*, 1999; Eisenhardt and Martin, 2000; Karim and Mitchell, 2000; Winter, 2003). Moreover, dynamic capabilities are often described in the academic literature as processes which rapidly yield new knowledge (Collis, 1994; Grant, 1996).

On the basis of strategic initiative stimulated interactions between different resources and knowledge base, the assumption emerges that initiative specific dynamic capabilities evolve and facilitate the creation of dysfunctional knowledge and destructive resource combinations. According to Eisenhardt and Martin (2000), dynamic capabilities are facilitators which enable the creation of new resources and

transformation of the knowledge base of the firm. Hence, idiosyncratic strategic initiative-specific dynamic capabilities can initiate knowledge creating processes which are dysfunctional. Therefore, the new and emerging bundles of resources can become problematic and unstable in producing the expected values for the firm. Furthermore, connections between different distinctive strategic initiative related knowledge bases can stimulate incompatibilities and rejections which iteratively strengthen the evolution of destructive dynamic capabilities which reinforce previously established boundaries and barriers. In this regard, dynamic capabilities depend closely on existing knowledge – and especially on the existing knowledge base of the strategic initiative – which gives rise to experimental and non-linear outcomes (Ethiraj *et al.*, 2005). This explains why different strategic initiatives faced similar resistances and barriers as initial stimulations of "destructive" dynamic capabilities created new ground for destructive knowledge from which new and "destructive" initiative related dynamic capabilities emerged and created multiplier effects across the organisation and other ongoing strategic initiatives. In addition, the production process of combining new and old resources and different knowledge bases relates to strategic initiative specific dynamic capabilities. Hence, if strategic initiative related interactions between different specialised knowledge bases lead to dysfunctional outcomes, destructive knowledge is created and the dynamic capability changes from value creating to being destructive of stimulating the dysfunctional effects and knowledge, as identified through specific challenges, analysed by this study.

These findings lead to the conclusion that dynamic capabilities in the context of strategic initiatives can stimulate two transformational processes: a business constructive process which reflects the planned and expected results of the strategic initiative; and a business destructive process which generates dysfunctional effects similar to the evolution of the "bad" and "good" habits of a human being. Hence, the value of dynamic capabilities relate to both facilitating the creation of new sources of competitive advantage and to facilitating the termination of existing and future sources of the firm's competitive advantages due to the quality and value of the relative knowledge base emerging from strategic initiative related resource and

knowledge base interactions. These conclusions lead the discussion of strategic initiative interactions to the knowledge based theory.

### 8.3.3 Strategic Initiative Interactions in the Context of the KBV

The following section focuses on the discussion on the concept of strategic initiative related knowledge bases and particularly on how the firm and strategic initiative specific knowledge bases are affected by ongoing initiatives. Furthermore, the discussion on the strategic initiative related knowledge creation process is based on the interactions observed between a strategic initiative and the firm's organisational context and interactions between a strategic initiative and other ongoing strategic initiatives.

#### 8.3.3.1 Affecting Firm and Strategic Initiative specific Knowledge Bases

The concept of interactions between a strategic initiative and the firm's organisational context or other ongoing strategic initiatives highlights new and emerging connections with a firm's idiosyncratic knowledge base. Wielemaker (2003) argued that strategic initiatives create their own knowledge base over the entire life cycle from the idea to the implementation. In this regard, the interactions observed strengthen the argument that strategic initiatives are linked to other knowledge bases of a firm (Lechner *et al.*, 2003; Marx, 2004). However, the quantity of interactions may not be always a driver for successful strategic initiative implementations because those interactions comprise the problematic aspect of ambiguity in leading to new sources of a firm's competitive advantage.

Furthermore, strategic initiative related interactions provide the theoretical bases on which different mental models (Senge, 1990), working procedures (Hackbarth and Grover, 1999), histories (Hall, 1984), organizational routines (Cyert and March, 1963) and organizational cultures (Walsh and Ungson, 1991; Walsh, 1995) can be combined across the organisation. The strategic initiative related interactions are able to connect with a firm's different and idiosyncratic knowledge bases, including the connection with other ongoing strategic initiative related knowledge bases, by creating the opportunity to transform existing resources into new sources of competitive

advantage. However, especially the emerging connections among strategic initiative related knowledge bases are affected by the form and rationale of a strategic initiative as radical, autonomous, internal or globally oriented ( Burgelman, 1988; Henderson and Clark, 1990; Birkenshaw, 1997). Therefore, strategic initiative related knowledge bases are individual, heterogeneous and specialized in so far as they serve specific strategic purpose. Hence it follows that the knowledge base of strategic initiatives and the possibility to interact and connect different knowledge bases of strategic initiatives relate to their degree of individuality and the homogeneity of the strategic initiatives which create them. This argument implies that strategic initiative interactions generate both other emerging knowledge bases of the firm and the problematic of potential conflicts among different strategic initiative related knowledge-base interactions. These characteristics lead to the consequence that strategic initiative implementation and transformation activities may raise challenges, because some interactions between different knowledge bases are business destructive and hamper the firm's strategy making process. Those kinds of challenges are observed in all three strategic initiative cases studies, and they are classified and defined as main challenges based on the analysis and comparison of the three strategic initiative case studies as:

- *Emerging resistances, boundaries and barriers against and between ongoing strategic initiatives*
- *Conflicting perspectives and challenging dependencies between ongoing initiative strategies and implementation plans*

This includes the iterative feature that an emerging challenge can stimulate new challenges, defined as *Challenging iterations and multiplier effects due to organisational and initiative related interactions*. Furthermore, strategic initiatives often occur for a specific strategic reason (Kownatzki, 2002; Zott, 2003). Therefore, strategic initiatives that relate to emerging knowledge bases reflect a wide range of specialized knowledge, often described in the academic literature as 'deep knowledge' (Demsetz, 1991; Leonard-Barton, 1995; Hansen, 1999). Deep knowledge is specialized, functional and complex and it enables a strategic initiative to achieve

its objectives as strategic initiatives pursue specific strategic purposes. This specialization and focus leads to the assumption that conflicts arise among ongoing strategic initiatives. An illustrative example – classified as effect (22) within the CRM Convergence initiative case study – concerning interactions between the Deal Management Process initiative and the CRM Convergence initiative will help strengthen the assumption that knowledge bases conflict among ongoing strategic initiatives. The Deal Management Process initiative classified new customer engagements according to their risks, whereas the CRM Convergence initiative classified new customer engagements according to their sales potential and business volume. This led to inefficient overlaps and conflicts between initiative specific knowledge bases. Hence it follows that knowledge bases, and especially strategic initiative related knowledge bases, are highly specialised and limited in their ability to be connected and combined. In this regard, strategic initiative related knowledge bases are highly heterogeneous according to their specialised combination of broad and deep knowledge. There arises the dilemma whereby strategic initiatives are forced to be highly specialized to increase the chances of achieving their strategic purpose, whereas an increase in specialization leads to incompatibilities between strategic initiative related knowledge bases with challenging outcomes and effects. Hence, strategic initiative related interactions with other strategic initiative related knowledge bases provide the opportunity to interact with different sources of potential competitive advantage as far as the interaction is feasible and able to produce valuable results for the firm's strategy implementation process.

To enrich the discussion of the strategic initiative related interactions in the context of knowledge based theory, discussion of the strategic initiative related knowledge creation process provides additional insights into how relevant dynamic capabilities emerge.

#### 8.3.3.2 Stimulating Knowledge Creation through Initiative related Interactions

This section discusses strategic initiative interactions in the context of knowledge creation. Every strategic initiative creates knowledge which is necessary for successful initiative implementations. However, initiative-specific knowledge creation

processes may overlap with other knowledge creation processes within ongoing initiatives and challenge the value of the emerging knowledge stored in the initiative-specific knowledge bases.

The KBV and the related academic literature describe strategic initiatives as knowledge creating entities which facilitate different phases of linking, interpreting, and integrating new knowledge (Wielemaker *et al.*, 2001; Wielemaker, 2003). These phases imply that the strategic initiative connects to other knowledge bases of the firm. These connections are established in the three strategic initiative case studies through the interactions classified. The interactions with the firm's organisational context created new connections with the firm's repository and related processes or routines to guide organisational action for initiative related implementation activities (Argote, 1999; Argote *et al.*, 2000; Patriotta, 2003). The interactions between other ongoing initiatives created new connections between ongoing initiatives, where emerging and initiative-specific repositories engaged with other emerging initiative-specific repositories to activate the creation of new tacit and explicit knowledge (Nelson, 1991; Nonaka and Takeuchi, 1995; Nonaka and Konno, 1998; Patriotta, 2003). The consequences of interactions between different ongoing initiatives seem to be more complex and neglected by the academic literature in comparison to the interactions between a strategic initiative and a firm's organisational context (Wielemaker, 2003; Marx, 2004).

On the basis of emerging interactions between different ongoing strategic initiatives, this study has identified various aspects within the idiosyncratic knowledge creation process of the firm. Strategic initiatives are dynamic action units from which interactions with other ongoing initiatives emerge to acquire, share, and combine knowledge into a collective product through experience with each other (Argote *et al.*, 2000; Wielemaker *et al.*, 2001). In the context of the case studies conducted, interactions between ongoing initiatives emerged in five different ways. Interactions based on the strategic initiative were intended to establish new standards across other ongoing initiatives and to align or consolidate ongoing initiative activities and goals with the initiative's own objectives and activities. Furthermore, strategic initiative

administration and management processes were influenced by other ongoing initiatives: in particular, how to manage initiative individual objectives, results, expectations and expected values according to the firm's overall strategies. This stimulated another group of emerging interactions between ongoing initiatives – interactions which facilitated the convergence of different initiative-specific activities. The last group of interactions emerged from de-fragmented and specialised initiative related knowledge bases. This characteristic related to the problem that strategic initiatives created more interactions between emerging and distinct knowledge bases of ongoing initiatives which were faced by the challenge of incompatibilities between two or more previously disconnected knowledge domains.

The reasons for this may be that strong deviations between the interconnected knowledge bases of the initiatives, as the organisation, and especially other ongoing initiatives, established individual and controversial skills and capabilities between each other, which provoked resistance by some of the action units involved, according to Leonard-Barton's (1992) concept of emerging core rigidities. Furthermore, strategic initiative related knowledge bases comprise heterogeneous decision-making mechanisms and individualised ways of sense-making. In this context, sense making is defined in the academic literature as an important driver of new organizational knowledge (Thomas *et al.*, 1993). Therefore, established sense making routines within the individual initiative started to create challenges during the interaction with other initiative related decision- and sense making capabilities and sometimes generated difficulties between the initiatives. These consequences relate to the heterogeneity of tacit knowledge carriers, because initiatives can be defined as tacit knowledge carriers which address the challenges of heterogeneity and incompatibility, according to Nonaka and Takeuchi´s (1995) theoretical concept of 'knowledge carrier'.

Another aspect concerns the possibility of facilitating additional complexities alongside initiative-specific and incompatible knowledge bases. For strategic initiative related knowledge bases are highly specialised and therefore heterogeneous. Different ongoing strategic initiatives may pursue different strategic purposes and therefore create different forms of relevant knowledge, which may give rise to

specialized knowledge bases for each strategic initiative. Emerging interactions between the two specialised and controversial knowledge bases may create difficulties because both controversial strategic initiatives related knowledge bases are necessary on their own for successful implementation of the firm's strategies. Hence, strategic initiative related knowledge bases may not be always useful for interacting with other specialised knowledge bases and are therefore problematic for the strategic initiative related knowledge creation process. The problem depends on the number of ongoing strategic initiatives within a firm and their implementation range and focus.

In summary, and on the basis of Nonaka and Takeuchi's (1995) definitions of knowledge creation as a process of continuous and dynamic interaction between tacit and explicit knowledge, all the interactions observed between a firm's organisational context and ongoing initiatives activated strategic initiative specific and sometimes uncontrolled knowledge creation processes. In this context, the observed initiative related interactions played an important role in activating the reconfiguration of firm-specific resource configurations and knowledge base transformations. Furthermore, the interactions observed can aid understanding of the strategic value of the emerging knowledge because not all knowledge is equally valuable (Eisenhardt and Galunic, 2000; Gupta and Govindarajan, 2000). The interactions observed stimulated the creation of new knowledge and qualified the knowledge creation process as supportive or not supportive according to the development process of new sources of sustainable competitive advantage. In the three strategic initiative case studies, the interactions observed actively drove the firm's specific knowledge creation process in the context of strategic initiatives for successful strategy implementations. Those strategy implementation activities were influenced by strategic initiative individual drivers. Those drivers played a key role in strategic initiative implementation processes and are discussed in previous sections in the context of the dynamic capability theory.

### 8.3.4 Closing Reflection of the observed Challenges and Dysfunctional Effects

This section summarises the discussion on the challenges observed as emerging from strategic initiative implementation activities by reflecting established theories. Those

theories are based on the results of the literature review chapter and provide a theoretical ground for discussion of the categorised findings of the main challenges and dysfunctional effects.

The finding of this study helps to extend the understanding of how core rigidities (Leonard-Barton, 1992) emerge in the context of strategic initiative implementation. Existing firm resources and the new resources combined and deployed by strategic initiative related dynamic capabilities are business destructive and leads to potential core rigidities. Instead of establishing new sources of competitive advantage based on Barney's (1991) definition, the old and new resources create rejections and sever the established connections of the new resource reconfigurations stimulated through initiative specific and dysfunctional dynamic capabilities (Mahoney and Pandian, 1992; Black and Boal, 1994). Outlined through the first main challenge of initiative implementation, defined as *emerging resistance, boundaries and barriers against and between ongoing strategic initiatives*, initiative related activities sometimes derive from existing competencies in the organisation and other ongoing initiatives, with the consequence that organisational units or other ongoing strategic initiatives facilitate resistance and establish boundaries against the ongoing strategic initiative actions. Hence, the findings of this study illustrate a way on how core rigidities can emerge through strategic initiative implementation.

Furthermore, the created rejections between old and new resources in the context of initiative implementations are based on *conflicting perspectives and challenging dependencies between ongoing initiative strategies and implementation plans,* which relates alongside the problem of incompatible resources to the concept of emerging knowledge bases, especially strategic initiative related knowledge bases (Nonaka and Takeuchi, 1995; Grant, 1996; Patriotta, 2003). These challenges are facilitated by detached knowledge creating processes stimulated through the dynamic capabilities of individual initiatives (Teece *et al.*, 1997; Eisenhardt and Martin, 2000). According to Nahapiet and Ghoshal (1998), instead of producing new inventions, knowledge creation creates overlapping and controversial results between ongoing strategic

initiatives, with the consequence of conflicting perspectives and challenging dependencies.

The third main challenge of strategic initiative implementation, defined in this study as *challenging iterations and multiplier effects due to organisational and initiative related interactions*, connects to Wielemaker's (2003) initiative related knowledge creating phases of linking, interpreting, and integrating. A strategic initiative does not necessarily have to proceed sequentially. Moreover, a strategic initiative creates knowledge through iterative loops (Van de Ven, 1992; Wielemaker, 2003). Hence, the repetition of different challenges and emerging dysfunctional effects is connected to the concept of iteration. Strategic initiative related dynamic capabilities stimulate knowledge creating processes and transformations which are iterative and able to create – alongside the expected results – repetitions of new challenges and emerging dysfunctional effects for the organisation and other ongoing strategic initiatives. Those observed and classified dysfunctional effects from the three in-depth strategic case studies (see Figure 29) are the following:

- *Drifting Targets,*
- *Emerging Resource Lacks,*
- *Neglect of Available Resources,*
- *Operational Complexities, and*
- *Problem Multiplier*

These are groups of dysfunctional effects, and they can best be described as unexpected disorders which impact upon the entire company and produce business destructive outcomes. Furthermore, those dysfunctional effects are the consequences of the challenges arising from initiative related implementation activities – facilitated through strategic initiative specific dynamic capabilities. The dysfunctional effects observed and classified closely relate to McGrath et al.'s (1995) argument that competitive advantage is unlikely to emerge from a strategic initiative unless the related activities are able to develop capabilities in what they are doing. In this context, the development of the required capabilities may not always be successful

because the dysfunctional effects result from the strategic initiative's limitation in implementing its goals and objectives successfully. According to the results of the strategic initiative case study analysis, dysfunctional effects are one of the main reasons why companies fail to implement their strategies through strategic initiatives.

Furthermore, dysfunctional effects add to the theoretical debate the additional aspect that an initiative's success relates to its organisational embeddedness (Uzzi, 1996; Soda and Usai, 1999; Gargiulo and Benassi, 2000; Chung *et al.*, 2000; Lechner *et al.*, 2003; Marx, 2004). Scholars have shown that increasing the organisational embeddedness of a strategic initiative improves its performance (Lechner *et al.*, 2003; Marx, 2004). These arguments do not take the problematic aspect of business destructive outcomes from dysfunctional effects into account, because the strategic initiative's success relates only partly to its organisational embeddedness. Strategic initiative related interactions with the firm's organisational context or other ongoing initiatives comprise a certain amount of autonomous behaviour which constantly surrounds management teams and stakeholders related to the initiative with ambiguity (Khanna *et al.*, 2000; Kownatzki, 2002; Zott, 2003). Furthermore, the initiative related dynamic capabilities identified by this study perform a twofold role in the successful implementation of the firm's various strategies. On the one hand, those dynamic capabilities enable the successful initiative implementations. However, on the other hand, the dynamic capabilities observed create additional complexities and challenges for the firm and ongoing initiatives which in this study are termed 'dysfunctional effects'. Hence, an increasing interaction of the initiative with the firm's organisational context and other ongoing initiatives increases the potential destructive outcomes from dysfunctional effects. Therefore, greater organisational embeddedness can increase the interactions with the firm's organisational context and other ongoing strategic initiatives and reduce the overall performance of the strategic initiative because of the production of dysfunctional effects. Accordingly, the result of this thesis is that a strategic initiative's success depends on its ability to facilitate related dynamic capabilities for a successful implementation and not to become lost in challenging dependencies and interactions with other ongoing initiatives. In addition, besides organisational embeddedness, interactions with other ongoing initiatives are

crucial for the success of a strategic initiative. Hence, the discovery of the dysfunctional effects increases the importance of focusing on interactions with other ongoing initiatives and it enriches current strategic initiative related implementation concepts with the findings of this study (McGrath, 1996; Uzzi, 1996; Soda and Usai, 1999; Gargiulo and Benassi, 2000; Chung *et al.*, 2000; Lechner *et al.*, 2003; Wielemaker, 2003; Marx, 2004).

# 9 Conclusions

In order to develop one of the key debates in the strategic management literature further, this thesis has centred in particular on how strategic initiatives affect a firm's most valuable sources – idiosyncratic resources and knowledge bases – and what kinds of challenges emerge in the context of strategic initiatives to implement new business strategies (McGrath *et al.*, 1995; Lovas and Ghoshal, 2000; Floyd and Lane, 2000; Lechner *et al.*, 2003; Wielemaker, 2003; Marx, 2004). The concept of 'strategic initiatives' refers to a progressive form of strategy making whereby idiosyncratic key sources of a firm's competitive advantage are mobilised and renewed (Bower, 1970; McGrath *et al.*, 1995; Marx, 2004). In this regard, the study has addressed, combined and extended the various issues debated within the selected main bodies of literature in light of the following research question:

*How do strategic initiatives affect the existing resources and knowledge base in the context of renewing a firm's competitive advantage?*

In finding answers to this research question, several aspects have been covered by this research. The research objective has been to increase understanding on how the idiosyncratic resource and knowledge base of a firm is affected by strategic initiatives. A further purpose has been to identify the interactions of strategic initiatives and emerging challenges in the context of strategic initiative implementation, with the consequence that how those challenges arise has been analysed. Finally, the research has concentrated on identifying the drivers facilitating different challenges, and on what consequences arise in the context of strategic initiative implementation.

The theoretical findings contribute to the main bodies of the literature selected. The strategic initiative literature has been extended through an integrated perspective on initiative related strategy making. The resource based theory has been enriched through new synergies between the RBV and the strategic initiative concepts. These synergies augment the overly static RBV with insights into how competitive resource

combinations can emerge and become both valuable and problematic for the firm, and with discussion on the combination of old and new resources in the context of strategic initiative implementations. The dynamic capability literature has been enriched with additional insights into the role and values of strategic initiative related dynamic capabilities in the context of successful implementations. The knowledge based theory has been extended through new insights into how strategic initiatives affect and relate to the knowledge base creation of a firm. Furthermore, this study has highlighted the consequences of business destructive knowledge creation (dysfunctional knowledge) due to strategic initiative related interactions between differences in a firm's and other strategic initiative related knowledge bases. Finally, the thesis has provided cross-theory integration in the context of strategy making.

Despite the growing importance of strategic initiative implementation in management practice, the research findings provide guidelines on how such implementations can be managed professionally. This aim of the dissertation has been to provide insights and specific suggestions for the professional management of strategic initiatives in regard to their implementation. More specifically, the aim has been to highlight the following aspects. Firstly, strategy making in the context of strategic initiatives reqires the reinforcement of the management of strategic initiative related interactions with the firm's organisational context and other ongoing initiatives. Secondly, strategic initiatives develop their own knowledge bases and connect to other strategic initiative specific knowledge bases. These knowledge base combinations must be managed according to their potential synergies and potential challenges. Thirdly, not all strategic initiative related knowledge is equally useful for the achievement of the company's strategic objectives. Therefore, prioritizing the strategic relevance of the knowledge arising from strategic initiative implementations is necessary to prevent upcoming challenges. Fourthly, the case studies in this dissertation highlight that challenges may emerge during strategic initiative implementations. These challenges need to be detected at an early stage in order to avoid problematic situations during the initiative's implementation. Finally, the management team must constantly reinforce value creation by the strategic initiative by preventing the escalation of potential challenges from generating various dysfunctional effects for the entire

company. Therefore, constantly reinforcing and energizing the value creation of ongoing strategic initiatives requires managers involved take on a different role and perspective.

In summary, this study has achieved its stated aim by filling the research gap identified with an analysis of the dysfunctional effects that arise during strategic-initiative implementation processes. The analysis has compared the three different strategic initiatives and their interactions with the organisational context and other ongoing initiatives. Moreover, it has discussed the formation of initiative related implementation challenges and the emerging consequences defined as dysfunctional effects. These dysfunctional effects and the relative findings led to theoretical discussion of the results of the analysis in light of the main body of the literature selected, as now described.

## 9.1 Contributions and Implications

In seeking to explore one of the currently underdeveloped areas of strategic initiative directed strategy making for the purpose of transforming a firm's resources and knowledge base, a grounded theory that depicts the dysfunctional effects of strategic initiative implementation has been proposed. Building on a critical examination and analysis of the phenomena selected, this thesis has provided an empirical account that is exploratory in design and integrative in nature. By placing the emphasis primarily on outcomes instead of purely on the processes of strategic initiative implementation and emerging dysfunctional effects, the insights generated by this study enhance our understanding by providing a more comprehensive picture of the area investigated. Furthermore, the contribution made by this study is not solely theoretical; it also has managerial implications. The following sections highlight the main theoretical and managerial contributions and implications of this study.

### 9.1.1 Theoretical Contributions and Implications

This study has contributed to the strategy making literature in various areas, especially those of resource based theory, the theory of dynamic capabilities, and the knowledge based theory of the firm in light of the strategic initiative concept. One

central topic of the strategy making literature concerns renewal of the firm's sources of competitive advantage (Penrose, 1959; Grant, 1996; Barney, 1991; Teece *et al.*, 1997; Eisenhardt and Martin, 2000), in regard to which strategic initiatives can play a crucial role (McGrath *et al.*, 1995; Wielemaker, 2003). This study has gone beyond discussion on how strategic initiatives can facilitate the renewal of a firm's unique sources of competitive advantage. Furthermore, it has described and illustrated the challenges that emerge during the renewal process as existing firm resources are combined with new resource bases. Moreover, the study has extended the work of strategic initiative related studies by highlighting the relevance of strategic initiative interactions with the firm's organisational context and other ongoing initiatives (Lechner *et al.*, 2003; Wielemaker, 2003; Marx, 2004). In this regard, the study contributes in different ways to renewing a firm's most valuable sources of competitive advantage through the creation of new knowledge. Strategic initiative related knowledge creation processes may produce dysfunctional effects over time which may in turn hamper the renewal of the firm's sources of competitive advantage in different ways. In this context, strategic initiative related dynamic capabilities perform a twofold role during the renewal process. Besides their value-creating resource manipulation functionalities (Mitchell *et al.*, 1999; Eisenhardt and Martin, 2000; Karim and Mitchell, 2000), dynamic capabilities can turn into business destructive processes based on the creation of dysfunctional knowledge within an initiative's knowledge bases and described in this study in terms of emerging challenges and the creation of dysfunctional effects. Finally, these various research findings have enabled this study to furnish an integrated perspective on initiative related strategy making by enhancing existing strategy implementation concepts in the context of strategic initiatives (McGrath, 1996; Uzzi, 1996; Soda and Usai, 1999; Gargiulo and Benassi, 2000; Chung *et al.*, 2000; Lechner *et al.*, 2003; Wielemaker, 2003; Marx, 2004).

#### 9.1.1.1 Contribution to the Strategic Initiative Literature: An Integrated Perspective

One of the main contributions of this study is its integrative and novel perspective on strategic initiative related dysfunctions in the context of successful strategy

implementation. In this regard, the study proposes a new conceptualization which yields new insights into strategic initiative related strategy implementations. Three different main concepts have been proposed, which not only enable critical comparison with current empirical findings but also synthesise and integrate different areas that to date been examined in isolation.

The discussion of strategic initiative interactions with the firm's organisational context and other ongoing initiatives has identified three different aspects. Firstly, the making of new and competitive bundles of resources through strategic initiative related interactions between new and old firm resources and the combination of strategic initiative related knowledge bases (Barney, 1991; Mahoney and Pandian, 1992; Black and Boal, 1994; Grant, 1996). In this regard, new bundles of resources emerge from the five different types of strategic initiative related interactions that have been observed and classified. Three different types of interactions have been identified between the strategic initiative and the firm's organisational context, and five different types of interactions among ongoing strategic initiatives. Secondly, these interactions have been shown to create connections between different idiosyncratic knowledge bases of the firm and other ongoing initiatives (McGrath *et al.*, 1995; Wielemaker, 2003). In this regard, different boundaries of knowledge base heterogeneity and incompatibilities have been observed and discussed in detail. Thirdly, the strategic-initiative interactions activate controlled and uncontrolled processes of knowledge creation (Nonaka and Takeuchi, 1995; Wielemaker, 2003).

The second concept concerns the drivers of strategic initiative implementation, conceptualised as strategic initiative related processes. Those processes equate to the theoretical concept of dynamic capabilities and generate two different implementation outcomes as initial, commonly planned and expected results. Secondly, the strategic initiative related processes identified create knowledge, especially dysfunctional knowledge based on the incompatibilities and heterogeneity of interacting knowledge bases in the context of initiative implementations. These interacting knowledge bases with the characteristics of being controversial, inoperative and inefficiently redundant with regard to other knowledge bases of the firm – and especially in the context of

strategic initiatives – generate the dynamic capabilities classified: dynamic capabilities which turn into business-destructive processes with various challenging outcomes (Teece and Pisano, 1994; Teece *et al.*, 1997; Mitchell *et al.*, 1999; Eisenhardt and Martin, 2000; Karim and Mitchell, 2000; Winter, 2003).

The third concept relates in particular to the analysis and classification of the observed strategic initiative related implementation challenges such as resistances, boundaries, and barriers against ongoing initiatives or conflicting perspectives and dependencies between ongoing initiatives with problematic iterations and multiplier effects. These challenges arise from the ambiguity of strategic initiative related interactions and implementation activities (Zott, 2003). This ambiguity relates to the connections between an initiative action and their results. Therefore, the managers and stakeholders of a strategic initiative are unable to understand exactly what they are doing right, and whether their decisions will lead to the expected results (Lippman and Richard, 1982; Reed and Robert, 1990). Hence strategic initiatives are able to achieve two different results: firstly, the successful implementation of a firm's strategy by transforming existing firm sources of competitive advantage; secondly, the creation of business destructive processes which limit a firm's ability to utilize its key resources to reshape its competitive advantage. These findings enrich the current understanding and theories of strategic initiative related strategy implementations with the conceptualised theory of strategic initiative related dysfunctions (McGrath, 1996; Uzzi, 1996; Soda and Usai, 1999; Gargiulo and Benassi, 2000; Chung *et al.*, 2000; Lechner *et al.*, 2003; Wielemaker, 2003; Marx, 2004).

#### 9.1.1.2 Contributions to the Resource Based Theory

The findings of this study increase the theoretical understanding of how existing firm resources are combined with new firm resources in the context of strategic initiative implementation. Firm resources are combined through strategic initiative interactions. The concept of emerging interactions relates to Black's (1994) concept of "cogency relationships" as resources are surrounded by various kinds of relationships. These relationships connect and shape a firm's existing resource configuration, often described in the academic literature as a 'bundle of resources' (Barney, 1991; Peteraf,

1993; Black and Boal, 1994). Therefore, the findings of this study contribute to the resource based theory in two different ways.

Firstly, strategic initiatives created interactions connect new resources with existing ones through different kinds of emerging relationships. These relationships are established by strategic initiative related implementation activities which affect the potential capacity to determine a firm's competitive advantage. These emerging interactions comprise aspects of ambiguity in achieving the initiative's expected results because information is missing, or because possible outcomes are difficult to estimate and the strategic initiative is entering uncharted territory. In this regard, the strategic initiative combines new resources with old ones through interactions without knowing exactly whether the new combinations will lead to the expected results and establish new sources for the firm's competitive advantage.

Secondly, emerging strategic initiative interactions explain how new bundles of firm resources come about. These new bundles of resources can give rise to new competitive bundles of resources if they are valuable, rare, inimitable, and non-substitutable (Teece, 1982; Barney, 1991). The interactions observed represent the first step in creating new bundles of resources by connecting established firm resources with new ones transformed and deployed through strategic initiative actions. Furthermore, those new bundles of existing and new firm resources may not always lead to competitive resource configurations and new sources of competitive advantage. Therefore, the observed interactions combine the strategic initiative concept with the resource based theory through the explanation of causal ambiguity whereby strategic initiative related implementations may not always lead to the expected results (Reed and Robert, 1990).

In summary, the findings highlight new synergies between the RBV and the strategic initiative concept. These synergies enrich the overly static RBV with insights into how competitive resource combinations can emerge and become both valuable and problematic for the firm. In the case of the RBV, no adequate explanation is available on how and why successful firms able to allocate the resources required fail to renew

their sources of competitive advantage, especially in competitive environments where such renewal is essential. The synergy of the RBV with the strategic initiative concept provides explanations as to why the combination of existing and new resources in the context of strategic initiatives may not always lead to competitive bundles of resources. According to Barney's (1991) description of resource attributes as valuable, rare, inimitable and non-substitutable, emerging resource configurations can be qualified as new sources of competitive advantage. However, dysfunctional knowledge as a specific resource may emerge from new resource combinations of existing and new resources, and may be again combined with different firm resources. These combinations are challenging for the firm as dysfunctional effects emerge which become business destructive. Moreover, new resource configurations emerging from strategic initiative interactions comprise ambiguities and may become business destructive for two further reasons. Firstly, strategic initiatives are faced with the dilemma of protecting a firm's current idiosyncratic competencies by reconfiguring the firm's resource base at the same time. This challenge is risky and may not always lead to constructive business outcomes. Secondly, ambiguous interactions between existing and new firm resources may at a later stage become inefficient and incompatible because dysfunctional knowledge emerges, so that the initially promising resource configuration generates higher costs which reduce the firm's ability to gain above-average and sustainable rents (Chatterjee and Wernerfelt, 1991; Foss and Knudsen, 2003; Peteraf and Barney, 2003).

#### 9.1.1.3 Contributions to the Dynamic Capability Literature

Dynamic capabilities that are critical and supportive to initiative implementations are major prerequisites for successful strategic initiative implementations. This study has shown that strategic initiative related implementation activities are influenced and affected by five different key processes which relate to the theoretical core functionalities of the resource manipulation processes of dynamic capabilities, namely: management support processes, decision processes to prioritise and implement changes, organisational administration and support processes, processes of interpretation, processes of acceptance, and processes of combination (Mitchell *et al.*, 1999; Eisenhardt and Martin, 2000; Karim and Mitchell, 2000; Winter, 2003).

Moreover, these processes reflect strategic initiative specific dynamic capabilities by facilitating and enabling the renewal of a firm's sources of competitive advantage through strategic initiatives. Therefore, these five observed strategic initiative related processes are a source for the initiative to renew a firm's sources of competitive advantage. However, the value of the five initiatives related dynamic capabilities identified by this study relates mainly to their ability to improve the firm's existing bundles of resources and knowledge bases. According to Eisenhardt and Martin's (2000) theoretical analysis on how dynamic capabilities facilitate the manipulation of firm resources through their functionalities, the processes observed drive resource manipulations across the firm to establish new sources of competitive advantage for it.

Furthermore, the dynamic capabilities observed relate to a firm's idiosyncratic knowledge base, including the five different key processes that use resources to integrate, reconfigure, gain and release resources and extend current knowledge bases to establish new sources of competitive advantage for the company (Amit and Schoemaker, 1993; Eisenhardt and Martin, 2000; Winter, 2003).

Besides the ability to facilitate reconfiguration of a firm's resources and knowledge bases, the strategic initiative related dynamic capabilities are improvisational and dissipatory, meaning that they require constant energy to stay on track: according to Griffith and Harvey (2001), if they have too little structure, they may easily slide to the edge of chaos (Ethiraj *et al.*, 2005). These characteristics match the observations in this study.

Moreover, the strategic initiative related dynamic capabilities identified by this study perform a twofold role in the successful implementation of the firm's strategies through strategic initiatives. On the one hand, the strategic initiative related dynamic capabilities support the implementation of new strategies and business directions accordingly to their plans and expected results (goals and objectives). However, on the other hand, the dynamic capabilities observed create additional complexities and challenges for the firm and ongoing initiatives which lead to business destructive

outcomes and results, termed in this study as 'dysfunctional effects'. These dysfunctional effects reflect the production of dysfunctional knowledge within the firm's knowledge bases and turn the dynamic capabilities involved from value-creating entities into business-destructive processes, producing various and sometimes iteratively new dysfunctional effects.

Moreover, dynamic capabilities are often described in the academic literature as processes which gain new knowledge quickly (Collis, 1994; Grant, 1996). Therefore, activated through strategic initiative-driven interactions between different resource and knowledge bases and facilitated by the strategic initiative related dynamic capabilities to manipulate the firm's existing resource and knowledge bases, the strategic initiative related dynamic capabilities are constantly shaped by initiative-implementation activities to produce the expected results or to stimulate the onset of dysfunctional knowledge, based on destructive resource and knowledge base combinations. In this context, the observed strategic initiative related dynamic capabilities are idiosyncratic, initiate, and are initiated by, knowledge creating processes which are dysfunctional. The emerging dysfunctional knowledge is integrated with the firm's existing knowledge bases in the same way as non-dysfunctional knowledge, which in turn iteratively influences the evolution of new idiosyncratic dynamic capabilities of the strategic initiative and the firm.

This finding helps enrich current understanding on how strategic initiatives utilise emerging and interconnected knowledge bases, and it strengthens the argument that strategic initiatives are knowledge creating entities which create new knowledge through linking, interpreting and integrating new knowledge (Wielemaker *et al.*, 2001; Wielemaker, 2003). In addition, the finding enriches the conception of initiatives as knowledge creating entities because strategic initiatives are able to create new dysfunctional knowledge which leads to business destructive outcomes, alongside the creation of new and supportive knowledge. Therefore, the new resource configurations and knowledge bases emerging from strategic initiatives may be problematic, and unstable in producing the expected values for the firm.

In summary, the dynamic capabilities observed in the context of strategic initiative implementations can facilitate the generation of two different outcomes: business constructive outcomes which reflect the planned and expected results of the strategic initiative, and business destructive outcomes which stimulate dysfunctional effects similar to the evolution of "bad" and "good" habits in a human being. Therefore, strategic initiative related dynamic capabilities have the power to facilitate the creation of new sources of competitive advantage and the power to facilitate the termination of existing sources of the firm's competitive advantages, doing so on the basis of knowledge emerging from strategic initiative related resource and knowledge base interactions.

#### 9.1.1.4 Contributions to the Knowledge Based Theory

This section outlines the contribution of the thesis to the knowledge based theory, in particular its new insights into how strategic initiatives affect and relate to the knowledge base creation of a firm. In this regard, the study has shown that not all the knowledge created through strategic initiatives is equally valuable, and that it may even become business destructive. The second part of this section outlines the consequences of business destructive knowledge creation (dysfunctional knowledge) based on strategic initiative related interactions between different specialised and distinct knowledge bases of the firm and other ongoing initiatives, and finally outlines its strategic implications.

##### 9.1.1.4.1 Insights into Strategic Initiative related Knowledge Base Creation

Knowledge creation plays a vital role in strategic initiative related implementation activities to renew of a firm's sources of competitive advantage. In this regard, the finding of this study that strategic initiative related interactions create connections with other knowledge bases furnishes additional insights into how a strategic initiative facilitates the development of its own knowledge base over time (Wielemaker *et al.*, 2001; Wielemaker, 2003). Moreover, during the connection of distinct knowledge bases through strategic initiative stimulated interactions, the initiative encounters rejections and incompatibilities among emerging knowledge base combinations, for several reasons. Firstly, strong deviation, or when controversial knowledge bases

create inefficient overlaps which neutralise the effectiveness of individual initiative transformations and cannot be avoided completely because every strategic initiative is launched for a specific strategic reason (Kownatzki, 2002). Therefore, strategic initiatives and emerging knowledge bases reflect a wide range of specialized knowledge, often described in the academic literature as 'deep knowledge' (Demsetz, 1991; Leonard-Barton, 1995; Hansen, 1999). Such knowledge is specialized, functional and complex and it enables the strategic initiative to achieve its objectives successfully because strategic initiatives pursue specific strategic purposes. This may create conflicting knowledge bases among different ongoing initiatives which are described as 'dysfunctional' in this study.

Strategic initiative related knowledge bases are necessary for successful implementation of the firm's strategies and the focus of an individual initiative implementation process, but they are not necessarily helpful in combination with different ongoing strategic initiative implementation processes. Therefore, specialized knowledge bases are necessary for successful strategy implementations, but they are not necessarily compatible with all other emerging knowledge bases, with the consequence of overlapping and redundant knowledge – utilization of dysfunctional knowledge – in the context of ongoing strategic initiatives. Secondly, strong deviations between connected and initiative related knowledge bases create boundaries and barriers. These barriers relate to the idiosyncratic knowledge creation process of ongoing initiatives. Individual ongoing initiatives establish mutually conflicting skills and capabilities which, according to Leonard-Barton's (1992) concept of emerging core rigidities, generate resistance by some of the action units involved. Thirdly, strategic initiative related knowledge bases are highly specialized and subjective. Therefore, individual initiatives create their own ways of sense making. In this regard, sense making is defined in the academic literature as an important source of new organizational knowledge (Thomas *et al.*, 1993). Consequently, established sense making routines, different forms of mental models (Senge, 1990), working procedures (Hackbarth and Grover, 1999), histories (Hall, 1984), organizational routines (Cyert and March, 1963) and organizational cultures (Walsh and Ungson, 1991; Walsh, 1995) within the individual initiative can create

challenges during the interaction with other initiative related capabilities. These consequences relate to the theoretical heterogeneity of tacit knowledge carriers. According to Nonaka and Takeuchi's (1995) concept of 'theoretical knowledge carrier', initiatives can be defined as tacit knowledge carriers which face the challenges of heterogeneity and incompatibility. Fourthly, strategic initiative interactions activate the firm specific knowledge creation process and provide a new framework in which to create measures with which to quantify emerging knowledge according to its strategic relevance, given that not all knowledge is equally valuable (Eisenhardt and Galunic, 2000; Gupta and Govindarajan, 2000). In particular, the interactions observed stimulate the creation of new knowledge and qualify the knowledge creation process as supportive or otherwise due to the development of new sources of sustainable competitive advantage. Finally, this study has examined the creation of dysfunctional knowledge in relation to initiative-oriented strategy implementation processes. Dysfunctional knowledge is stored within the firm's various knowledge bases and emerges through interactions with the firm's organisational context and other ongoing strategic initiatives. This kind of knowledge is a strategic threat for organisations because emerging knowledge bases may become imbued with dysfunctional knowledge which gives rise to dysfunctional effects and hampers the firm's value-creation process and its ability to renew its sources of competitive advantage.

#### 9.1.1.4.2 Insights and Consequences of Dysfunctional Knowledge Creation

Strategic initiative related interactions between different specialised and distinct knowledge bases stimulate idiosyncratic knowledge creation processes of the firm and give rise to dysfunctional effects which emerge through initiative implementation challenges. Those challenges reflect a specific context in which differently emerging dysfunctional effects can be described. These challenges occur alongside the expected and planned initiative results and divide the strategic initiative implementation results into two different types of emerging knowledge.

The first type of emerging knowledge is the outcome of the initiative implementations conducted, and it includes the expectations relating to the rationale of the strategic

initiative implementation activities undertaken to implement the defined business strategies. These transformations create new and business supportive knowledge which extends the firm's current knowledge bases and enables successful implementation of the business strategies defined in relation to established concepts of knowledge creation (Nonaka and Takeuchi, 1995; Moran and Ghoshal, 1996; Nonaka and Konno, 1998; Wielemaker, 2003). However, alongside the creation of business supportive and commonly expected knowledge, dysfunctional knowledge emerges through strategic initiative implementations and addresses to the firm's existing knowledge bases in the same way as generally new knowledge does. Furthermore, the emerging dysfunctional knowledge within the distinct and strategic initiative related knowledge bases turns the dynamic capabilities involved into destructive processes which generate various dysfunctional effects. Moreover, the emerging dysfunctional effects iteratively accumulate the existing knowledge bases with dysfunctional knowledge. Therefore, this type of knowledge is rather unexpected, undiscovered, and less predictable, and it has the capacity to stimulate various upcoming challenges from where uncontrolled dysfunctional effects arise.

In detail, strategic initiative related challenges are emerging situations in which existing firm resources interact with new resources in the context of strategic initiative implementations. However, the strategic-initiative interactions and implementations that thus emerge fail to establish new and competitive resource combinations (Barney, 1991; Chatterjee and Wernerfelt, 1991; Peteraf, 1993). Instead of the strategic initiative's expected results in reconfiguring the existing resource configurations, the initiatives observed in this study produced three main challenges with sometimes diverse uncontrolled outcomes for the entire company.

The first phenomenon observed was emerging resistances, boundaries and barriers against and between ongoing strategic initiatives and which related closely to Leonard-Barton's (1992) concept of core rigidities. More specifically, strategic initiative related activities sometimes derived strongly from existing competencies of the organisation and other ongoing initiatives, with the consequence that those organisational units or other ongoing strategic initiatives raised resistance and

established boundaries against the ongoing strategic initiative actions. Moreover, the resulting bundles of resources, including old and new ones, created barriers and severed the new connections within the emerging resource configurations (Mahoney and Pandian, 1992; Black and Boal, 1994). The second main challenge of conflicting perspectives and challenging dependencies between ongoing initiative strategies and implementation plans related to the problematic of incompatible resources and emerging knowledge bases, and in particular the strategic initiative related ones (Nonaka and Takeuchi, 1995; Grant, 1996; Wielemaker, 2003; Patriotta, 2003). More specifically, the new connections between distinct strategic initiative related knowledge bases faced incompatibilities which iteratively produced destructive dynamic capabilities that reinforced the boundaries and barriers previously observed in the case studies. Instead of creating new inventions, as reported by Nahapiet and Ghoshal (1998), the strategic initiative related knowledge creation processes activated led to overlaps and controversial results between ongoing strategic initiatives and their emerging knowledge bases, with the consequence of conflicting perspectives and challenging dependencies. The third main challenge related to challenging iterations and multiplier effects due to emerging initiative related interactions. This situation displayed iteration and connects to Wielemaker's (2003) initiative related knowledge creating phases of linking, interpreting, and integrating. In this regard, a strategic initiative does not necessarily have to proceed sequentially. Instead, a strategic initiative creates knowledge through iterative loops (Van de Ven, 1992; Wielemaker, 2003). Furthermore, initiative related dynamic capabilities closely rely on existing knowledge, which gives rise to experimental and non-linear outcomes (Ethiraj *et al.*, 2005). This explains why different strategic initiatives faced similar resistances and barriers as initial stimulations of "destructive" dynamic capabilities created a new basis of destructive knowledge from which new and "destructive" dynamic capabilities emerged and created multiplier effects across the organisation and other ongoing strategic initiatives. Therefore, strategic initiative implementation stimulates knowledge creating processes which are iterative and able to create – alongside the expected results – new challenges and emerging dysfunctional effects for the organisation and other ongoing strategic initiatives.

In light of the findings of this study, challenges can be summarised as stages where dysfunctional knowledge emerges and produces unexpected dysfunctional effects, according to the most accredited knowledge creation theories (Nonaka and Takeuchi, 1995; Grant, 1996; Nahapiet and Ghoshal, 1998; Wielemaker, 2003). These dysfunctional effects can best be described as unexpected disorders and emerging challenges for the entire company. In addition, dysfunctional effects are the unexpected dimension of transformational activities undertaken to renew and sustain a firm's competitive advantage in the context of strategic initiatives. According to the results of the case study analysis and case comparison, five different groups of dysfunctional effects were presented in section 8.2.2 and illustrated in Figure 28.

The dysfunctional effects observed and classified closely relate to McGrath et al.'s (1995) argument that competitive advantage is unlikely to emerge from a strategic initiative unless the related activities are able to develop capabilities in what they are doing. In this context, the development of the required capabilities may not always be successful. Dysfunctional effects can emerge as the results of the strategic initiative's limitation in implementing its goals and objectives successfully and reflect the reason why companies fail to implement their strategies through strategic initiatives. In this regard, the initiative related dynamic capabilities identified by this study perform a twofold role in the successful implementation of the firm's various strategies. On the one hand, these dynamic capabilities enable successful initiative implementations. However, on the other hand, the dynamic capabilities observed create additional challenges for the firm and ongoing initiatives and lead to dysfunctional effects.

Accordingly, one result of this thesis is that a strategic initiative's success depends on its ability to facilitate related dynamic capabilities for successful implementation and not to become lost in challenging dependencies and interactions with other ongoing initiatives. In addition, alongside organisational embeddedness, interactions with other ongoing initiatives are critical for the success of a strategic initiative. The discovery of the dysfunctional effects highlights the importance of focusing on interactions with other ongoing initiatives due to the initiative's success and enriches current strategic initiative related implementation concepts with the findings of this

study (McGrath, 1996; Uzzi, 1996; Soda and Usai, 1999; Gargiulo and Benassi, 2000; Chung *et al.*, 2000; Lechner *et al.*, 2003; Wielemaker, 2003; Marx, 2004).

#### 9.1.1.5 Cross-Theory Integration in the Context of Strategy Making

There are few studies that have sought to show a link among the resource based view, dynamic capabilities and the knowledge base view in the context of strategic initiative implementations to reshape a firm's most valuable sources of competitive advantage. As observed and conceptualised, emerging strategic initiative driven interactions enable the initiative to combine new and resources and connect with different knowledge bases in the firm, especially knowledge bases from other ongoing strategic initiatives (Grant, 1996; Wielemaker, 2003). These interactions enable the initiative to extend and transform the firm's existing knowledge bases and create new bundles of resources to establish new sources of competitive advantage. Furthermore, the extension and transformation of existing idiosyncratic knowledge bases and new resource combinations require strategic initiative related dynamic capabilities (Teece *et al.*, 1997; Eisenhardt and Martin, 2000; Winter, 2003). These dynamic capabilities are processes which facilitate and enable the re-combination of the firm's existing resource and knowledge bases, according to the main functions of dynamic capabilities described by Eisenhardt and Martin (2000): resource creation, resource integration, resource re-combination, and resource releases. However, recombining new with existing resources and combining emerging and initiative specific knowledge bases of the firm are problematic tasks in the context of strategic initiative implementation. These re-combinations may lead, besides the expected result, to the creation of dysfunctional knowledge which turns the value creating functionalities of the strategic initiative related dynamic capabilities into business destructive processes, with the consequence of producing dysfunctional knowledge which is a strategic limitation on the renewal of the firm's most valuable sources of competitive advantage (Barney, 1991). Therefore, strategic initiative related dynamic capabilities are crucial for successful initiative implementation, and they are interrelated with the strategic quality of the emerging resource combinations and knowledge bases (Nonaka and Takeuchi, 1995; Patriotta, 2003; Wielemaker, 2003). In this context, dysfunctional knowledge reduces the strategic importance of emerging knowledge

and creates strategic issues for the existing and future sources of the firm's competitive advantage. Moreover, dysfunctional knowledge becomes embedded in the firm's emerging knowledge bases, reduces the value of the strategic initiative related dynamic capabilities involved, and raises challenges as an emerging resource within the new resource and knowledge base of the firm (Barney, 1991; Chatterjee and Wernerfelt, 1991; Grant, 1996; Nonaka and Konno, 1998; Peteraf and Barney, 2003).

In summary, this study has outlined new aspects in regard to the reshaping of a firm's competitive advantages through strategic initiatives. Firstly, a strategic initiative establishes new sources of competitive advantage through interactions among different resources and distinct knowledge bases of the firm. In this regard, emerging resource reconfiguration and knowledge-base combinations are limited and challenged by the production of dysfunctional knowledge. Secondly, strategic initiatives facilitate their implementation activities through dynamic capabilities which can become both business supportive and problematic in establishing new sources of competitive advantage. If dynamic capabilities become connected to dysfunctional knowledge, their value creating functionalities turn into business destructive outcomes reflected in various dysfunctional effects. Thirdly, the emerging dysfunctional knowledge as a new type of firm resource creates challenges if it is involved in the firm's reconfiguration process to create competitive resource configurations. Finally, dysfunctional knowledge represents a strategic threat for the strategic initiative related strategy making process because dysfunctional knowledge becomes embedded in the firm's emerging knowledge bases and potentially restricts the firm's long term ability to reshape its sources of competitive advantage.

### 9.1.2 Managerial Contributions and Implications

One of this study's key managerial implications is that managers must be aware of, and able to plan and manage strategic initiative implementation professionally, in particular the emerging challenges and dysfunctional effects deriving from strategic initiative implementation. The reason is that strategic initiatives are able not only to achieve their expected results but also to develop dysfunctional knowledge which

may induce the related processes to stimulate challenging situations from which dysfunctional effects emerge with business destructive outcomes. The latter may create strategic threats for managers during the strategic initiative implementation period. According to the findings of this study, managers must act more dynamically, exploring more proactively the possible implications of emerging strategic initiative interactions and reducing potential risks from emerging dysfunctional knowledge bases in order to facilitate and assure the firm's renewal of its competitive advantage.

#### 9.1.2.1 Managing the Range of Strategic Initiatives related Interactions

Managers should balance and reduce the complexities from ongoing initiative interactions with the organisational context and other ongoing initiatives. Before a strategic initiative is launched, it should be discussed and judged in the context of ongoing and planned strategy implementation activities. A strategic initiative may have a strategic rationale for the firm in isolation. However, its potential for unexpected interactions with other ongoing initiatives may produce challenging outcomes and limit the firm's ability to renew its sources of competitive advantage by challenging the ongoing initiatives. Therefore, managers must be able to manage strategic initiative implementation step by step by monitoring and judging ongoing and emerging interactions between strategic initiatives according to their potential range and scope. Hence, managers need to extend their existing repertoire of management tools with scenarios of emerging and potential strategic initiative interactions.

#### 9.1.2.2 Managing the Synergies of emerging Knowledge Bases

Managers should manage the potential synergies and limitations of the firm's emerging knowledge bases in the context of strategic initiatives. Knowledge bases emerging from strategic initiatives comprise strategic and valuable knowledge which is idiosyncratic and resists being combined with the firm's other specialised knowledge bases. This is especially the case during strategic initiative implementation and transformation activities. Managers should therefore increase their understanding of the firm's emerging and specialised knowledge bases, including the mix of deep and broad knowledge. Those knowledge bases may not lend themselves to

interconnection with other specialised knowledge bases because specific knowledge bases of the firm are necessary to implement specific strategies. The Sun Sigma initiative focused on enhancing the firm's process qualities and establishing process excellence standards. Nevertheless, at a later stage the Sun Sigma initiative interacted with the CRM Convergence initiative, with the consequence that the focus drifted to customer orientation instead of establishing process excellence standards across the organisation. In this context, the specialised and emerging knowledge base of the Sun Sigma initiative became combined with the CRM Convergence initiative, with the consequence that the Sun Sigma initiative became restricted in its deep knowledge and therefore in the effectiveness of its idiosyncratic knowledge base. Therefore, managers must be able to understand the synergies of their potential and emerging knowledge bases in order to prevent inefficient overlaps and incompatibilities among strategic initiative related knowledge bases.

#### 9.1.2.3 Prioritising the Strategic Relevance of Emerging Knowledge

Managers should understand and prioritise the strategic importance of emerging knowledge across their organisation. In this regard, strategic initiatives facilitate the creation of new knowledge. Furthermore, existing knowledge is replaced by new knowledge. In detail, not all emerging knowledge from strategic initiatives is equally relevant and valuable; it needs to be quantified according to its ability to promote the renewal of the firm's sources of competitive advantage in a supportive, less supportive or even destructive way. In this context, this study's identification of dysfunctional knowledge can help managers increase their understanding of irrelevant knowledge and create profiles on their dysfunctional knowledge so as to eliminate it through the prioritisation of strategic initiative implementation and transformation activities.

Furthermore, dysfunctional knowledge can be stored in different emerging knowledge bases, as when the Sun Sigma knowledge base became partly extended with CRM-oriented knowledge. This interaction stimulated additional medium-term Sun Sigma projects to improve existing customer satisfactions, with the consequence of inefficient overlaps between the Sun Sigma initiative and the CRM Convergence

initiative. The example outlines the need to define priorities between the Sun Sigma and CRM Convergence initiative to avoid doing everything at once by creating inefficient overlaps and dysfunctional knowledge within the Sun Sigma knowledge base.

Therefore, new knowledge may not always be strategically valuable for the emerging knowledge base of ongoing initiatives in a specific period of time; and once this kind of knowledge has been stored, iterations of ineffective and inefficient outcomes may occur. Hence, during their strategic initiative related strategy implementations, managers must both increase their understanding of potential emerging dysfunctional knowledge and determine where this kind of knowledge is stored. Furthermore, continuous prioritisation of initiative related resources may help to protect scarce firm resources and minimise the creation of ineffective knowledge.

#### 9.1.2.4 Early Detection of Critical Situations during Initiative Implementations

The findings of this study should help managers develop management tools with which to detect and manage critical situations during the strategic initiative implementations from which dysfunctional effects may arise. These critical situations have been defined in this study as initiative implementation challenges.

The first challenge has been summarised and defined as *emerging resistance, boundaries and barriers against and between ongoing strategic initiatives*. This situation can emerge from interactions between the strategic initiative and the organizational context or from interactions between different ongoing initiatives. The situation is characterised by different forms of emerging and challenging resistances, boundaries and upcoming barriers against the ongoing strategic initiative, or the strategic initiative facilitates blockages against other ongoing strategic initiatives and organisational units, so that challenges and complexities occur in the overall strategy implementation process. Managers may counter this kind of situation through a collaborative and proactive knowledge-sharing culture where team spirit and challenging the status quo are part of the firm's daily business operations. Furthermore, managers can avoid those situations by hiring innovative personnel who

challenge the firm's given rules, support interdisciplinary teams, and boost the firm's innovative potential through continuous improvements.

The second main challenge has been summarised as *conflicting perspectives and challenging dependencies between ongoing initiative strategies and implementation plans*. This challenging situation comprises the problems of different priorities, conflicting perspectives, misaligned agendas, individual interests, and challenging dependencies between different ongoing strategic initiatives. Managers can detect such situations in growing complexities among different ongoing strategic initiatives. Furthermore, initiatives may not always support each other in implementing their strategic objectives. Challenging dependencies and overlaps among the different initiative goals and directions may create critical dependencies between ongoing initiatives. Considering and facilitating continuous consolidations of excessively complex strategic initiative portfolios may help prevent this kind of challenge from which problematic effects may arise. In addition, the third situation of challenging iterations and multiplier effects highlights that a strategic initiative can facilitate iteratively different challenges during their implementation period.

In summary, managers must be aware of those specific situations – challenges during the initiative implementation and transformation activities which illustrate critical and unexpected environments for the strategic initiative implementation and transformation activities. However, they can help managers proactively to increase their awareness of the potential threats of dysfunctional effects. Furthermore, managers are able to identify problematic initiatives and decide on the next activities to prevent challenging outcomes for the firm and secure the strategy implementation process. In this regard, strategic initiatives are not necessarily a guaranteed and sure way to implement new business strategies for companies with little strategic initiative implementation experience and scant awareness of potential threats.

#### 9.1.2.5 Enforcing the Value Creation of Strategic Initiatives

Managers should focus on the value-creation process of strategic initiatives. Through challenges, strategic initiatives may give rise to dysfunctional effects which can lead

to business destructive outcomes during the strategy implementation process. These outcomes limit the value creation of individual strategic initiative and represent a new strategic threat for the company as it implements its strategies through strategic initiatives. According to the findings of this study, there are five groups of such dysfunctional effects:

- Drifting Targets
- Emerging Resource Lacks
- Neglect of Available Resources
- Operational Complexities
- *Problem Multiplier*

Each of these five categories comprises specific types of potential dysfunctional effects which may create difficulties for the entire organisation during its strategy implementation and reduce the value creation of strategic initiatives. Drifting targets may be avoided through a defined strategic intent of the initiative, which does not overlap with the firm's other strategic initiative objectives and does not allow any further interpretation for the implementation teams involved. Moreover, additional resource lacks can be minimized through redundant resources across the firm which can be utilised if required during the initiative's implementation. The neglect of available resources reflects incompatibilities between different knowledge bases and inefficiencies between the firm's new resource combinations. Such effects can be minimized by empowering initiative teams to decide on their own how to implement the initiative's defined objectives and overall strategies. In particular, initiative teams should be able partly to select their own methodologies and ways to implement the initiative, instead of a policy driven culture. In the example of the Sun Sigma initiative, other initiative teams were pushed into adopting the Sun Sigma methodologies and approaches, which reduced the effectiveness of the available resources. To minimize operational complexities, a company needs managers possessing competencies in both the firm's daily business operations and in implementing and supporting strategic initiatives across the organisation. In this regard, managers need to be project team members, explorers, innovators and

decision-makers who understand both fields and bring them together through progressive transformations. Finally, the fifth category of dysfunctional effects, *Problem Multiplier*, illustrates that emerging effects may iteratively stimulate new effects and specific situations from which additional and new dysfunctional effects can emerge. Therefore, managers are constantly required during the strategic initiative's entire implementation period to enforce the value creation of ongoing initiatives by preventing the onset of challenges, and by reacting rapidly to neutralise emerging dysfunctional effects across the organisation.

## 9.2 Limitations and Future Research

Despite the significant contributions at theoretical and managerial levels discussed above, the thesis obviously has some limitations that call for further research. This section outlines the study's shortcomings in its investigation of emerging challenges in the context of strategic initiative related implementations.

Firstly, it is clear from the way in which the current literature is reviewed that this study emphasizes primarily the challenges and effects that arise during the reconfiguration of a firm's resources and knowledge bases to renew competitive advantage in the context of strategic initiatives. In this regard, the identified strategic initiative related dynamic capabilities play a crucial role in assuring the success of strategic initiative related implementations. Therefore, additional research on classification and competitions of strategic initiative related dynamic capabilities and the concept of strategic initiative influencing dynamic capabilities may be required in the future. This limitation can be explained by the focus of this study, which has concentrated on challenging effects in the context of strategy implementation by understanding how strategic initiatives affect a firm's resource and knowledge base during the renewal of the firm's competitive advantages, rather than on classification of dynamic capabilities and strategic initiatives.

Secondly, in exploring dysfunctional effects during strategy making in the context of strategic initiatives, this study has been limited in its observation of strategic initiatives during the implementation stage rather than over their entire life cycles.

Further research should examine emerging dysfunctional effects in the context of strategic initiatives within a more complete observation where a more comprehensive longitudinal approach is taken. In particular, the employment of a longitudinal approach would enable future research to observe changes and mutations in the knowledge bases of a firm by including the history of combining new and existing firm resources within a broader organisational context.

Thirdly, this study has identified different types of dysfunctional effects in the context of strategic initiative implementation activities. However, the analysis has been restricted to the three case studies conducted on different types of business destructive qualities, and especially in relation to the strategic initiatives' evolving and changing knowledge bases. Therefore, the limited scope of the present research indicates that more research efforts are needed to address the issue of business destructive qualities as a means of understanding strategic initiative-driven implementations to renew a firm's sources of competitive advantages. More importantly, future research efforts should take into account the interplay between the two dimensions – dysfunctional effects and renewing a firm's sources of competitive advantage – rather than treating them as two separate concerns.

Fourthly, the present study has focused closely on the strategy implementation process. In this regard, strategic direction and strategy definition have been defined in this study as prerequisites. Nevertheless, understanding the interrelations between the strategy definition and strategy implementation processes in the context of strategy initiatives requires further research.

Fifthly, the present study focuses on three different strategic initiatives which aimed to implement the firm's strategic objectives and visions by transforming part wise the firm's organisational structures and processes and enrich the firm's current business tools. However, additional studies on different types of initiatives as product development initiatives (R&D initiatives) and Strategic Change initiatives would provide additional insights on the current findings. Furthermore, a comprehensive and

more holistic account on different types of strategic initiative would rely on more empirical analysis and strengthen the generalizability of the findings of this study.

Finally, this study has examined the nature of emerging challenges from the perspective of affecting a firm's resource and knowledge base through strategic initiative implementations. However, the processes through which organisations prioritise their strategic initiative related implementation activities are still largely unexplored. This evidently requires more research which examines how these decisions are made, and what issues in particular influence such decision-making processes. The concepts of sense making and decision-making, especially in the context of strategic initiative implementation, can provide a useful foundation for addressing such issues.

## 9.3 Conclusions

This study has shown that the interactions between ongoing strategic initiatives are critical factors in the success of initiatives. Therefore, strategic initiatives require management capacity to bring together the competencies of the firm's daily business operations to drive an initiative's implementation and transformation activities. In this regard, companies may not secure themselves against failure by only allocating and providing sufficient resources for strategic-initiative implementation. Moreover, managers need to understand critical constellations of ongoing strategic initiatives and areas of potential challenges. Those areas must be continuously managed, because the value creating capabilities of the ongoing initiative may, because of inefficient constellations with other ongoing initiatives or because of the firm's organisational context, turn into business destructive outcomes. Such outcomes may create dysfunctional knowledge which iteratively turns the value creating capabilities of strategic initiatives into challenges from which dysfunctional effects may arise. These dysfunctional effects are strategic obstacles against the management team's implementation of its strategies through strategic initiatives. Therefore, managers are required to balance effective strategic initiative implementation with their role as initiative driven explorers and innovators.

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# Appendix

## 1 Case Study Protocol Details and Questionnaires

**Prerequisites – Researcher's Case Study Preparation Check List**

- Collection of relevant background information about the next interviewees
- Update status and presentation of this research work to the scheduled interviewees (including introduction slides of the research project)
- Review current status of conducted interviews and prepare preliminary results of the research work for the next interviewees, if required
- Update, optimisation, and extension of the case study questionnaires

Used from the researcher before every scheduled interview.

**Questionnaire – Line-of Business, Management and Decision Maker**

Introduction and purpose of the discussion:

- The company's strategy implementation process
- Strategic initiatives and management experience
- Vision and Strategy formulation and decision making process, according to the company's strategic portfolio
- High level (strategic change) capabilities
- Management challenges and measurements (Key Performance Indicators)

Questions:

Company Environment:

- Can you describe the strategic challenges the company is facing today?
- How would you describe the actual situation of the firm?
- Which parts and company areas are affected by the firm's strategic challenges?

Strategic Initiatives:

- Describe your personal experience with strategic programmes and initiatives.
- How are the firm's key programs and initiative initiated and managed?
- Further ad-hoc questions on his/her specific strategic initiative experience.

Strategic Company Needs and Capabilities:

- Describe the vision, strategy formulation and implementation process according to the company's strategic needs and capabilities?
- How do you plan to transform the actual company capabilities?

Challenges during the strategic initiative related strategy making process:

- How do you recognise and manage the upcoming challenges during the strategy implementation process?
- Which kind of challenges are you/the company facing during the strategy implementation period?
- What role do strategic initiatives play within the company to transform the existing capabilities of the firm?

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**Questionnaire – Project and Competence Centre Team, Strategic Initiative Team**

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Introduction and purpose of the discussion:

- Strategic initiative integration and management processes
- Strategic initiative related challenges
- Programme or project challenges
- Transformation of business capabilities
- Decision making processes and resource (re-)allocation processes
- Value and value generation of strategic initiatives

Questions:

Strategic initiative processes and related issues:

- Describe your strategic initiative related integration and management processes.
- Describe your strategic initiative related challenges.

Managing strategic initiatives:

- Describe your experience of programme or project challenges.
- How do you manage the strategic capabilities?
- How do you plan to transform the strategic capabilities?
- How are your strategic initiative related to the firm's overall strategy making process?

Decision making and resourced allocation processes

- Describe the strategic initiative related decision making processes.
- Describe the resource re-allocation processes of your strategic initiative.

Capabilities/Core Capability Challenges during the transformation period:

- How do you recognise the effects and challenges during the transformation period and strategic initiative implementation period?
- Which role is played by the strategic initiatives in changing the existing capabilities?

**Questionnaire – Strategic Initiative "Customer" and Representatives**

Introduction and purpose of the discussion:

- Customer, Competitor and Market (external) challenges in the context of existing or new strategic initiatives (Strategic Relevance of Strategic Initiatives)
- Competitor reactions to and imitations of company's strategic programmes
- Customer reactions to company's strategic programmes
- Expected value of the ongoing /related strategic initiatives

Questions:

Customer perspective on the companies strategic initiatives:

- How are the expected values of the firm's strategic initiatives recognised?
- Do you have particular strategic initiative experience?
- How does the business react to the company's strategic programme activities?
- How do customers react to different strategic company programmes?

Line-of business perceptions of strategic initiatives:

- How do line-of business teams/individuals react to different strategic company programmes?
- What are the challenges and issues that line-of business teams/individuals are facing with the different strategic initiatives?
- How do you recognise the change in capabilities through the different strategic initiatives?

Decision making and resource allocation processes

- Describe the decision making processes in relation to the strategic initiatives.
- Describe the resource re-allocation processes in relation to the strategic initiative activities.

Transformation Challenges during the strategic initiative implementation period:

- How do you recognise the effects of transforming the existing company capabilities to prepare for the future business environment in the context of the strategic initiative?
- What role do the strategic initiatives play in changing the existing capabilities?

## 2 Case Study Interview Schedule

| Nr | Sun Background and Roles | Source | Role/Res-ponsibilities | Interview Date | Revised |
|---|---|---|---|---|---|
| 1 | Senior Sales Manager & Customer Representative | General Source; Involvement in different Key Programs/Initiatives | Line of Business & Management | 10/27/2004 | 11/20/2004 |
| 3 | Executive Management Team | General Source; Involvement in different Key Programs/Initiatives | Line of Business & Management | 11/17/2004 | 03.01.2005 |
| 12 | Senior Key Account Manager | General Source; Involvement in different Key Programs/Initiatives | Customer Projects | 06.01.2005 | |
| 14 | EMEA Business Development Manager | General Source; Involvement in different Key Programs/Initiatives | Customer Projects | 07.01.2005 | |
| 15 | Head Of Global Strategic Change Programs / Head of SBAP/GDA | General Source; Involvement in different Key Programs/Initiatives | Project / Competence Center Organisation | 04.02.2005 | |
| 22 | Head of Sun Educational Services Switzerland | General Source; Involvement in different Key Programs/Initiatives | Line of Business & Management | 02.01.2005 | |
| 23 | Senior Key-Account Manager | General Source; Involvement in different Key Programs/Initiatives | Customer Projects | 02.12.2005 | |
| 25 | Senior Engagement Manager | General Source; Involvement in different Key Programs/Initiatives | Customer Projects | 07/19/2006 | |
| 36 | EMEA Sales Operations | General Source; Involvement in different Key Programs/Initiatives | Project / Competence Center Organisation | 11.12.2005 | |
| 40 | EMEA Vice President | General Source; Involvement in different Key Programs/Initiatives | Line of Business & Management | 10.10.2004 | |

| Nr | Sun Background and Roles | Source | Role/Res-ponsibilities | Interview Date | Revised |
|---|---|---|---|---|---|
| 2 | Senior Project Manager/Sun Sigma Projects | Sun Sigma | Project / Competence Centre Organisation | 11.12.2004 | 18.12.2004 |
| 8 | Head of New (Merged) Service Delivery Org. | Sun Sigma | Line of Business & Management | 10.01.2005 | |

| | | | | | |
|---|---|---|---|---|---|
| 9 | Senior VP, Global Teams and Programs. Co-Founder of Sun Switzerland in early 80s - Six Sigma Champion | Sun Sigma | Line of Business & Management | 10/21/2005 | |
| 10 | Senior Practice Manager, Sun Sigma Green Belt | Sun Sigma | Line of Business & Management | 12/28/2004 | |
| 11 | Senior Project Engineer, Sun Sigma Green Belt | Sun Sigma | Customer Projects | 12/29/2004 | |
| 16 | Former Head of Professional Services UK and Storage Solutions UK & Sun Sigma Project Manager | Sun Sigma | Line of Business & Management | 11.12.2004 | |
| 21 | Senior Program Manager & Sigma Black Belt | Sun Sigma | Project / Competence Centre Organisation | 03.02.2005 | |
| 26 | District Manager – Central Switzerland & Sun Sigma Champion | Sun Sigma | Customer Projects | 07/26/2006 | |
| 27 | Sales of the Year (2001) – Sales Manager Switzerland & Sun Sigma Green Belt | Sun Sigma | Customer Projects | 07/28/2006 | |
| 30 | Sun Sigma Expert & Special Projects | Sun Sigma | Project / Competence Centre Organisation | 02.08.2005 | |
| 34 | EMEA Sales Operations & Sun Sigma Projects | Sun Sigma | Project / Competence Centre Organisation | 02.03.2006 | |
| 38 | Sun Sigma Master Black Belt | Sun Sigma | Project / Competence Centre Organisation | 02.08.2005 | |
| 43 | Special Projects – North America & Sun Sigma Project Manager | Sun Sigma | Customer Projects | 11.12.2006 | |
| 44 | Special Projects – North America & Sun Sigma Project Manager | Sun Sigma | Customer Projects | 11.12.2006 | |
| 45 | Controlling – North America & Sun Sigma Black Belt | Sun Sigma | Line of Business & Management | 10.01.2007 | |
| 46 | EMEA Sales Operations & Sun | Sun Sigma | Project / Competence | 08.08.2006 | |

| | | | | | |
|---|---|---|---|---|---|
| | Sigma Projects | | Centre Organisation | | |
| 47 | CTO EMEA & Sun Sigma Black Belt | Sun Sigma | Line of Business & Management | 06.07.2005 | |

| Nr | Sun Background and Roles | Source | Role/Responsibilities | Interview Date | Revised |
|---|---|---|---|---|---|
| 5 | Senior Executive (former Sun Employee) & CRM Team Switzerland | CRM | Line of Business & Management | 12/20/2004 | |
| 6 | Strategic Key-Account Engagement Manager & CRM Representative | CRM | Customer Projects | 12/29/2005 | |
| 7 | CFO Sun CNE (Central- and Northern Europe) & CRM Core Team | CRM | Line of Business & Management | 07.01.2005 | 01/28/2005 |
| 20 | Senior Program Manager & CRM Projects | CRM | Project / Competence Centre Organisation | 14.03.2006 | |
| 24 | Global KAM & Solution Architect | CRM | Customer Projects | 10/18/2005 | |
| 28 | Program Manager CRM Convergence Program | CRM | Project / Competence Centre Organisation | 08.12.2006 | |
| 32 | EMEA SBAP Project Manager CRM | CRM | Project / Competence Centre Organisation | 05.05.2006 | |
| 33 | EMEA SBAP Project Manager CRM | CRM | Project / Competence Centre Organisation | 10.05.2006 | |
| 35 | EMEA SBAP Project Manager CRM | CRM | Project / Competence Centre Organisation | 11.12.2005 | |
| 37 | EMEA SBAP Project Manager CRM | CRM | Project / Competence Centre Organisation | 02.08.2005 | |
| 49 | CRM Project Manager Switzerland | CRM | Project / Competence Centre Organisation | 08.08.2006 | |
| 50 | CRM Key Accounts | CRM | Line of Business & Management | 03.10.2006 | |
| 51 | CRM Cusomer Sevices Switerland | CRM | Customer Projects | 03.10.2006 | |

| Nr | Sun Background and Roles | Source | Role/Responsibilities | Interview Date | Revised |
|---|---|---|---|---|---|
| 4 | Senior Program Manager, Global Programs & BSC Core Team | BSC | Project / Competence Center Organisation | 12/13/2004 | 12/15/2004 |
| 13 | Senior PS VP Executive & BSC Core Team | BSC | Line of Business & Management | 06.01.2005 | |
| 17 | Headquarters Director & BSC Core Team | BSC | Line of Business & Management | 12.06.2005 | |
| 18 | Senior Engagement,Project Manager & BSC Team Switzerland | BSC | Customer Projects | 15.02.2005 | |
| 19 | EMEA Executive, Sales Operations & BSC Core Team (Executive Sponsor) | BSC | Line of Business & Management | 12/23/2004 | |
| 29 | EMEA Operations Manager & BSC Core Team Member | BSC | Project / Competence Centre Organisation | 10.03.2005 | 20.06.2006 |
| 31 | EMEA Sales Operations & BSC Core Team | BSC | Project / Competence Centre Organisation | 04.06.2006 | |
| 39 | Senior Project Manager and Deal Manager & BSC Team Switzerland | BSC | Customer Projects | 05.08.2005 | |
| 41 | CFO CNE Region & BSC Core Team | BSC | Line of Business & Management | 02.07.2006 | |
| 42 | EMEA Marketing Operations & BSC Core Team | BSC | Project / Competence Centre Organisation | 05.08.2006 | |
| 48 | Global Marketing & BSC Core Team | BSC | Line of Business & Management | 02.07.2006 | |

**51 conducted semi-structured interviews**

## Pilot-Interview Schedule

| Nr | Sun Background and Roles | Source | Role/Res-ponsibilities | Interview Date | Revised |
|---|---|---|---|---|---|
| 1 | Senior Sales Manager & Customer Representative | General Source; Involvement in different Key Programs/Initiatives | Line of Business & Management | 10/27/2004 | 11/20/2004 |
| 3 | Executive Management Team | General Source; Involvement in different Key Programs/Initiatives | Line of Business & Management | 11/17/2004 | 03.01.2005 |
| 40 | EMEA Vice President | General Source; Involvement in different Key Programs/Initiatives | Line of Business & Management | 10.10.2004 | |
| 2 | Senior Project Manager/Sun Sigma Projects | Sun Sigma | Project / Competence Center Organisation | 11.12.2004 | 18.12.2004 |
| 5 | Senior Executive (former Sun Employee) & CRM Team Switzerland | CRM | Line of Business & Management | 12/20/2004 | |
| 4 | Senior Program Manager, Global Programs & BSC Core Team | BSC | Project / Competence Center Organisation | 12/13/2004 | 12/15/2004 |

## 3 Company Sources – categories

Company sources can be categorized into public and non-public documentation. Public documentation includes internet content and official published documents. Non-public documentation includes intranet content, internal and unpublished documents, and interview data. The following table illustrates the differences between the two categories of documentation.

Categorisation of Important Company Sources

| ***Public Documentation*** | ***Non-public Documentation*** |
|---|---|
| Steve McGowan, CFO and Exec. Vice President Corporate Resources. Sun's Financial Overview 02/11/2004. 2004: 1-26. Notes: Analyst Presentation<br><br>Sun Microsystems, Inc. Sun: The Best Choice Of Your Business. 2002c. | Papadopoulos, Greg and Yen David. The Future of Network Computing. 2004: 1-44. Notes: Strategy Presentation, Headquarters Palo Alto, US<br><br>Sun Microsystems, Inc. Corporate Overview Version 1.1. 2002a: 1-77. Notes: Internal Presentation<br><br>---. Corporate Vision and Strategy Paper V.5.2. Sun Microsystems, Inc.2002b: 1-18. Notes: Internal Presentation<br><br>---. Sun Vision 08/27/04. 2004: -. Notes: Internal Documentation |

The list evolved over time. Based on the confidentiality of the non-public documentation the list outlines only an extract to illustrate the categories.

## 4 R&D Investment Overview

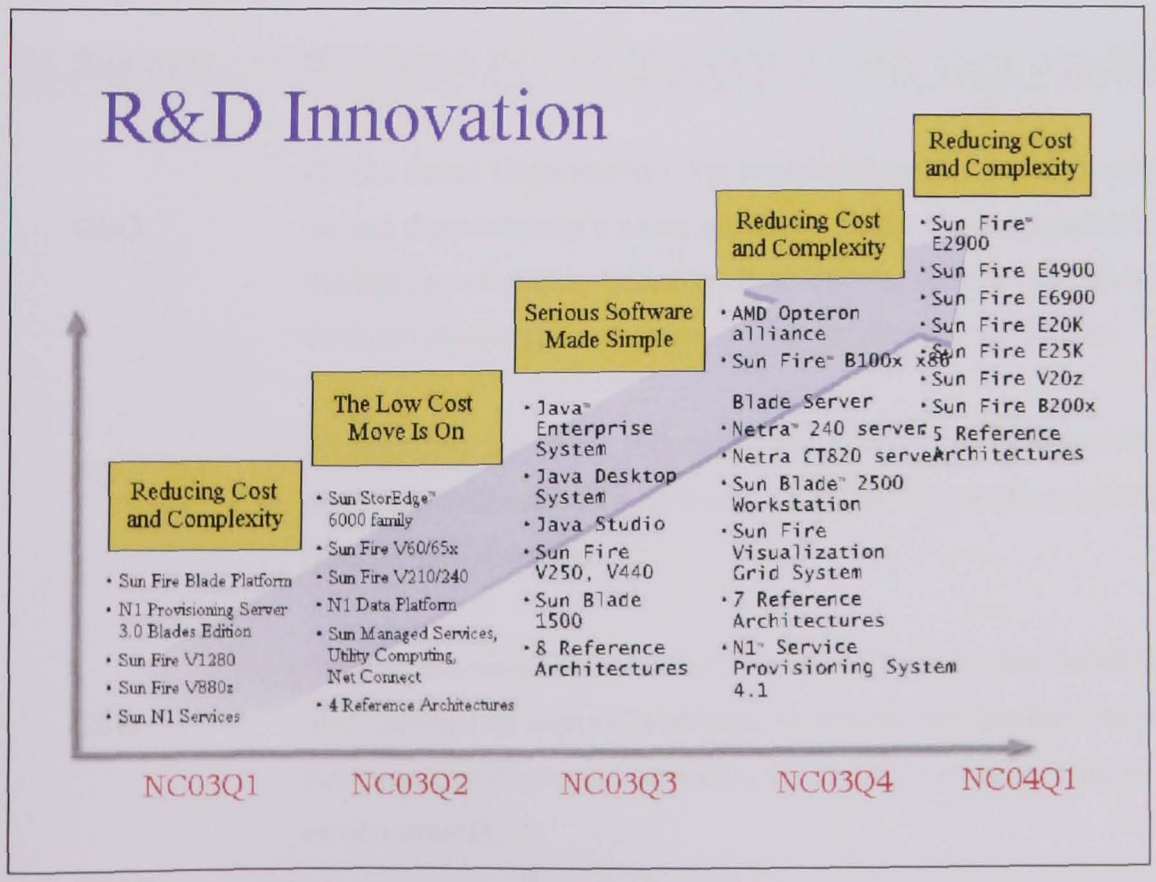
# R&D Investment: Comparison

| | Fiscal 2001 R&D spending | | Fiscal 2002 R&D spending | | Fiscal 2003 R&D spending | |
|---|---|---|---|---|---|---|
| | ($M) | % of sales | ($M) | % of sales | ($M) | % of sales |
| Cisco | $3'922 | 18% | $3'448 | 18% | $3'135 | 17% |
| Sun Microsystem | $2'016 | 11% | $1'832 | 15% | $1'837 | 16% |
| Intel | $3'796 | 14% | $4'034 | 15% | $4'360 | 14% |
| Microsoft | $4'379 | 17% | $4'307 | 15% | $4'659 | 14% |
| EMC | $929 | 13% | $781 | 14% | $718 | 12% |
| Oracle | $1'139 | 10% | $1'076 | 11% | $1'180 | 12% |
| IBM | $4'986 | 6% | $4'750 | 6% | $5'077 | 6% |
| Hewlett-Packard | $4'115** | 5% | $3'890** | 5% | $3'652 | 5% |

Source: 10-K filings. Fiscal year as each company reports
** Includes Compaq results

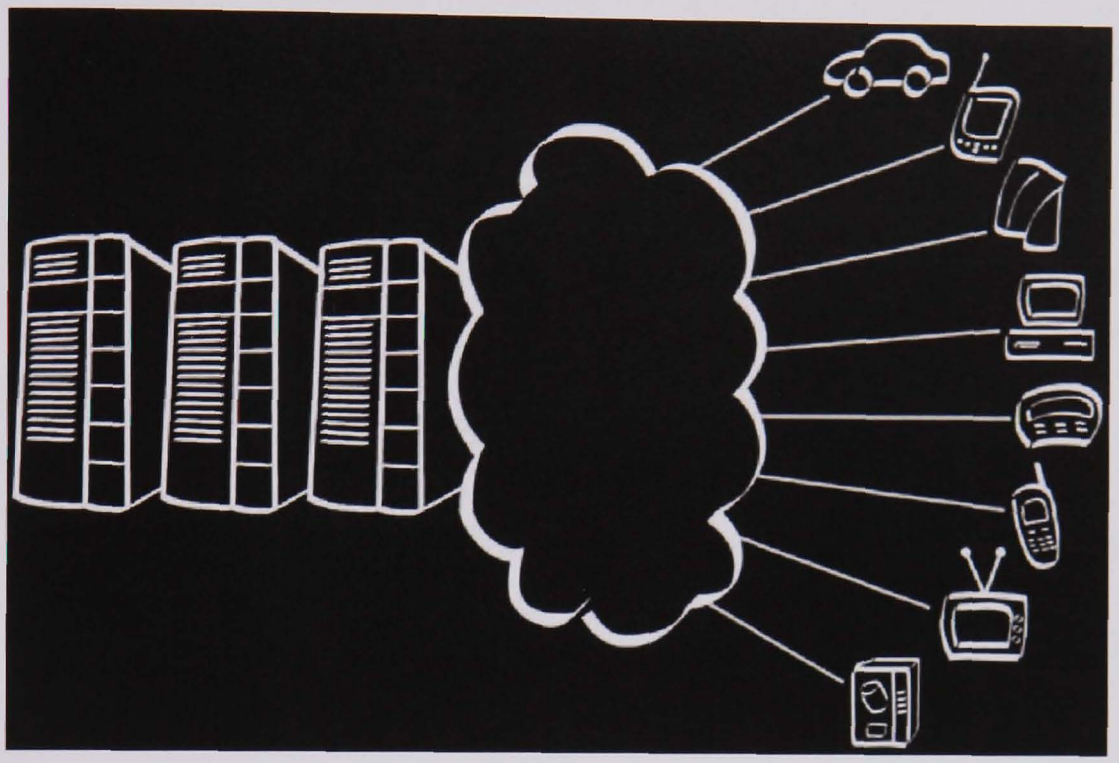
Source: (McGowan, 2004)

## 5 R&D Innovation Overview




Source: (McGowan, 2004)

## 6 Sun's Service-driven Network Architecture



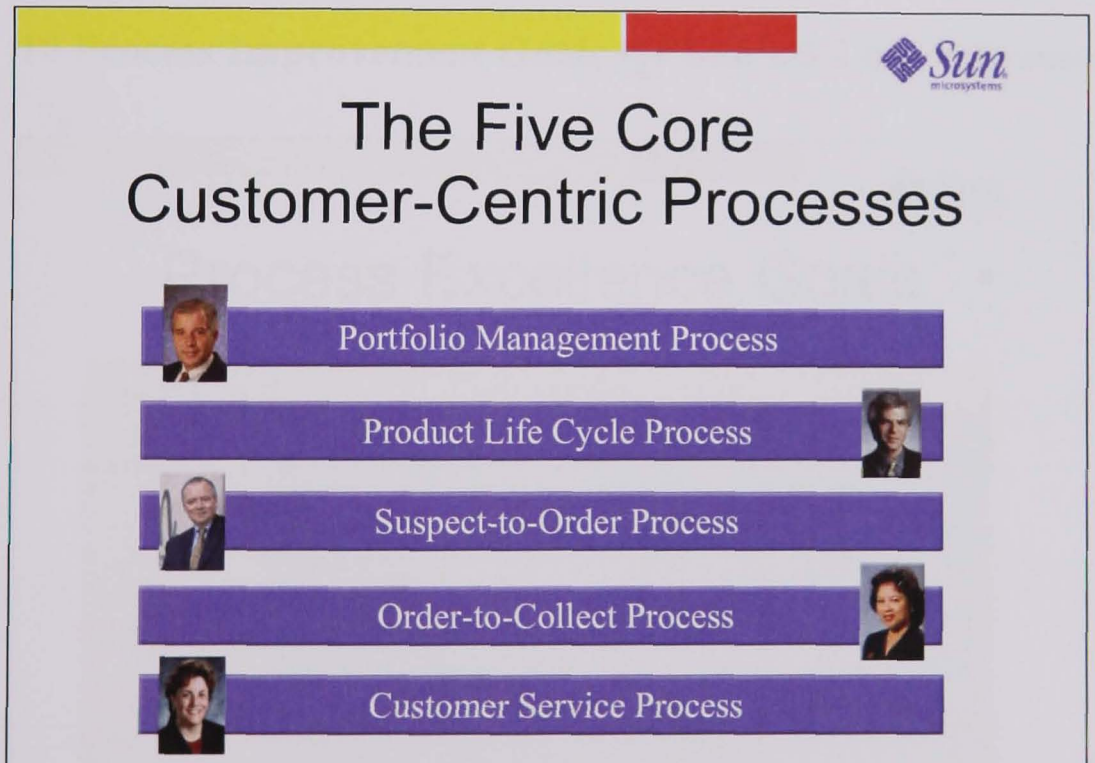
Source: (Sun Microsystems, 2002)

## 7 Glossary – Acronyms

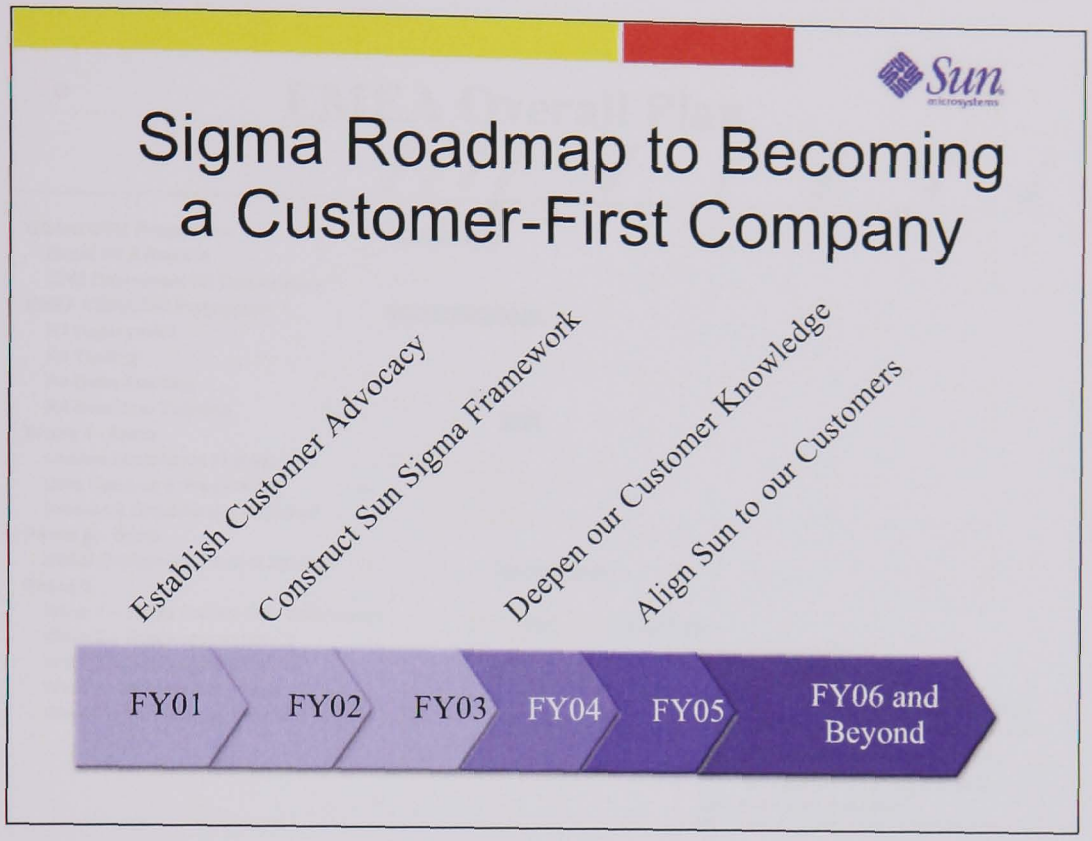
| Acronym | Description |
|---|---|
| GSO | Global Sales Organisation: the organisation was mainly responsible for driving the company's sales activities, customer engagements, and market penetrations. Officially, this organisation had the greatest decision power and influence on the company's strategies. |
| PS | Professional Services: this organisation was mainly responsible for all customer deliveries like projects, products or specific expert knowledge (e.g. Java Expertise). |
| SSO | Support Service Organisation: this arose from Global Sales Organisation and handled all support services, contracts, and partner networks for all customer maintenance services, for example mission critical environments. |
| SBAP | |

| | |
|---|---|
| | Strategic Business Architecture Programme: this department was responsible for setting up and rolling out the company's strategic initiatives. The group was close to the Global Sales Organisation. |
| CRM | Customer Relationship Management: a management concept and operating model to improve a company's overall sales and marketing effectiveness. |
| ROSS | Return On Sun Sigma: a cost-benefit analysis which outlined the cost savings which could be achieved through a Sun Sigma project. Each Sun Sigma project was asked to provide a ROSS business case. |
| Staroffice | Staroffice is Sun's equivalent to Microsoft Office. It provides different office software components as Word, Excel, Powerpoint etc. Sun sells Staroffice to their customers as a competitive alternative to MS Office. |

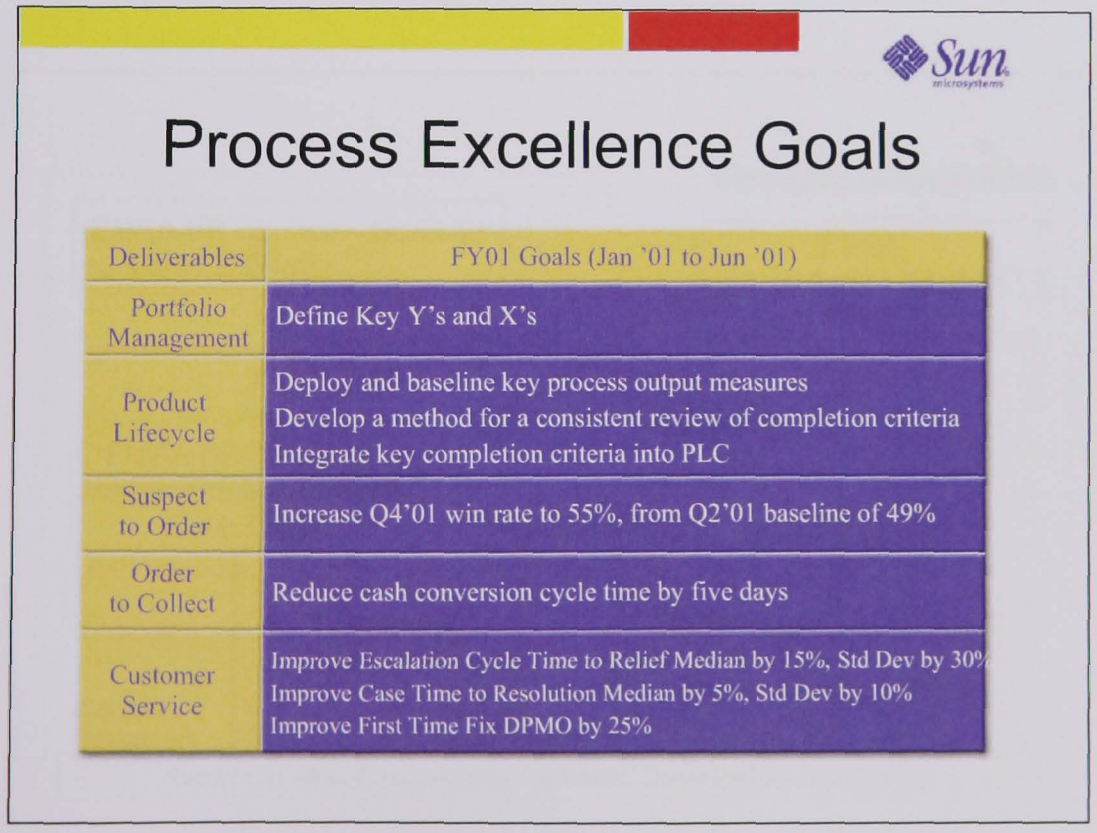
## 8 Five Core Customer-Centric Processes



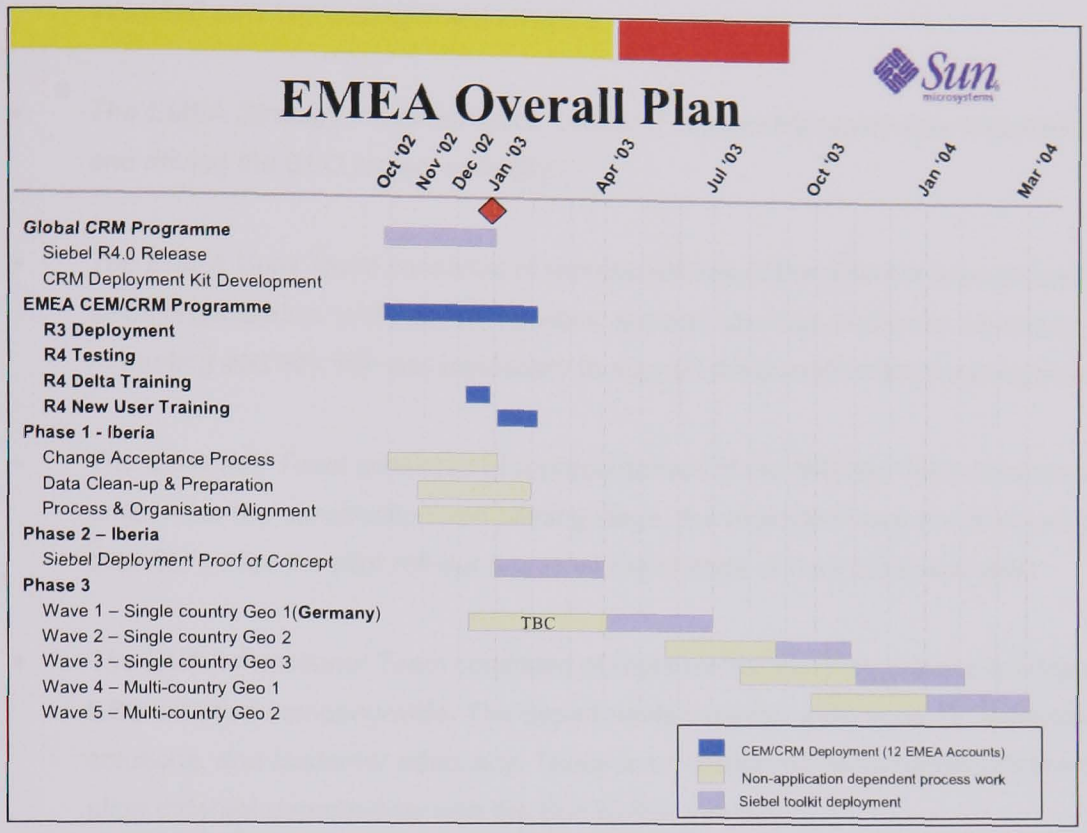
## 9 Overall Sun Sigma Roadmap



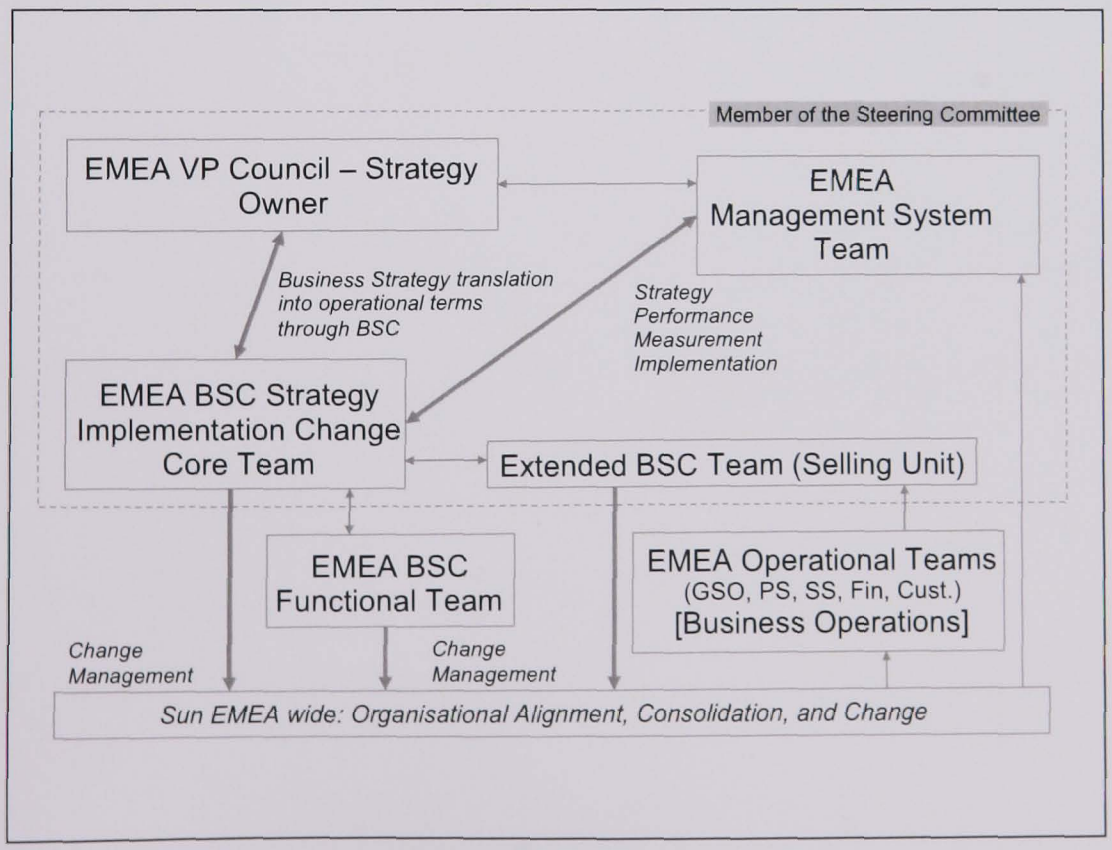

## 10 Process Improvement Goals for Sun's 5 Core Processes



## 11 EMEA CRM Convergence Project Plan




## 12 BSC Teams and Key Roles



- *The BSC Steering Committee* was formed from the EMEA VP Senior Management Team in order to ensure that that the balanced scorecard implementation project was initiated, developed, and executed as a top management initiative.

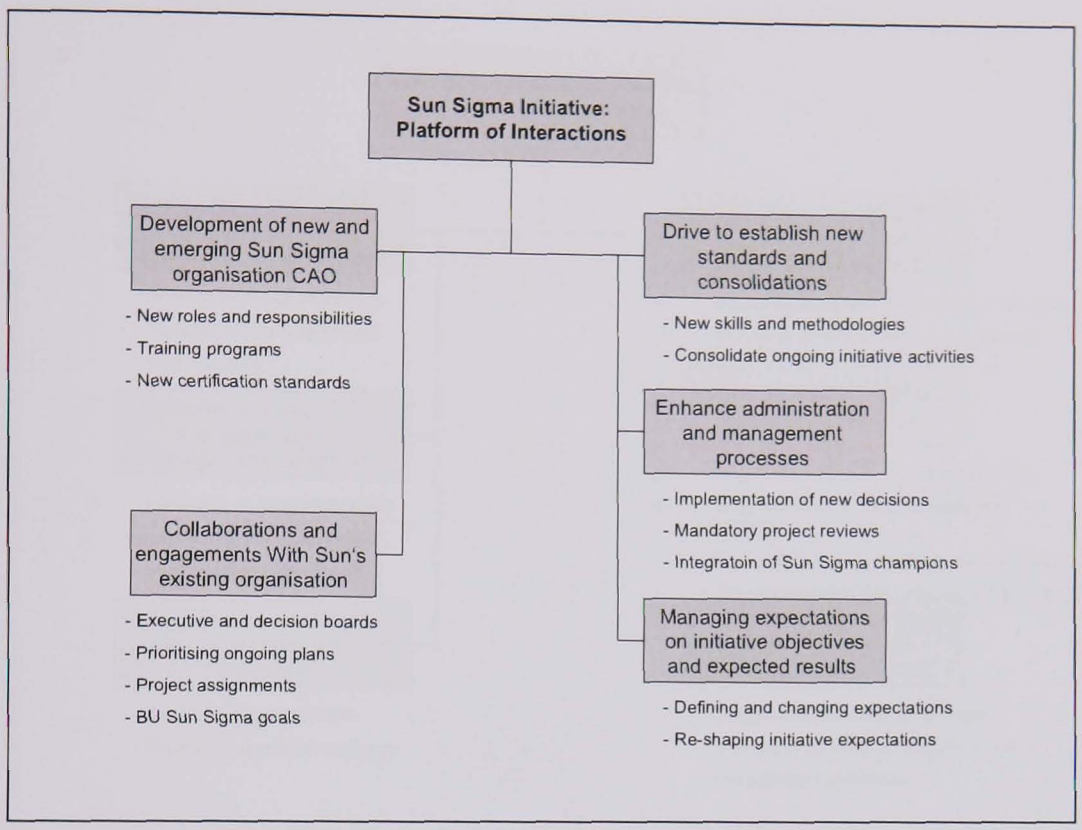
- *The EMEA Strategy Implementation Leader (Program Manager)* was responsible for coordinating and driving the BSC project correctly.

- *The EMEA Core Team* consisted of representatives of the different lines of business: the global sales organisation, professional services, support services, customer advocacy, finance, marketing and HR. HR was necessary to support the overall change management.

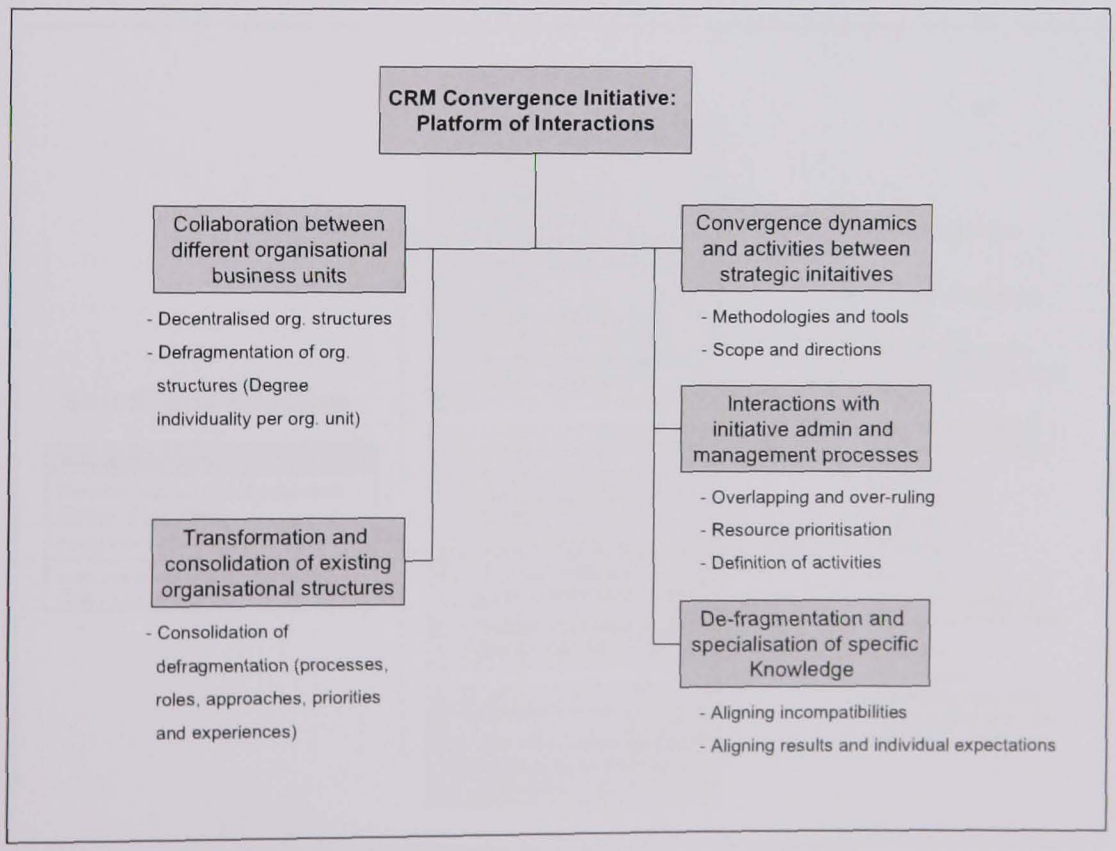
- *The Extended Team* consisted of representatives of the different lines of business and selling units. After the construction and piloting stage, the extended team members would remain with their SU's after the pilot roll-out and drive the change of their SU individually.

- *The EMEA Functional Team* consisted of representatives of important departments supporting the BSC initiative company-wide. The departments involved were legal, IT, marketing, channel, solutions, and customer advocacy. Those team resources were individually involved in order to align different departments with the Sun EMEA strategy.

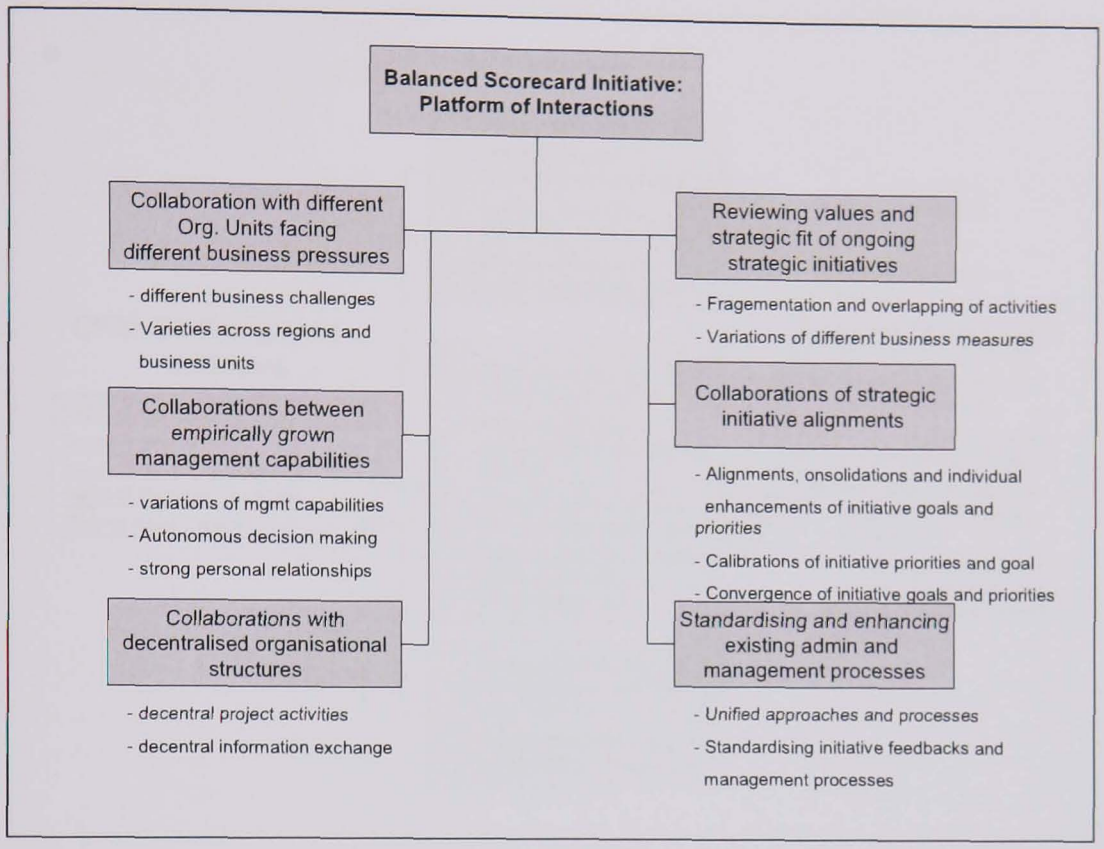
## 13 Summary of Sun Sigma Initiative Interactions



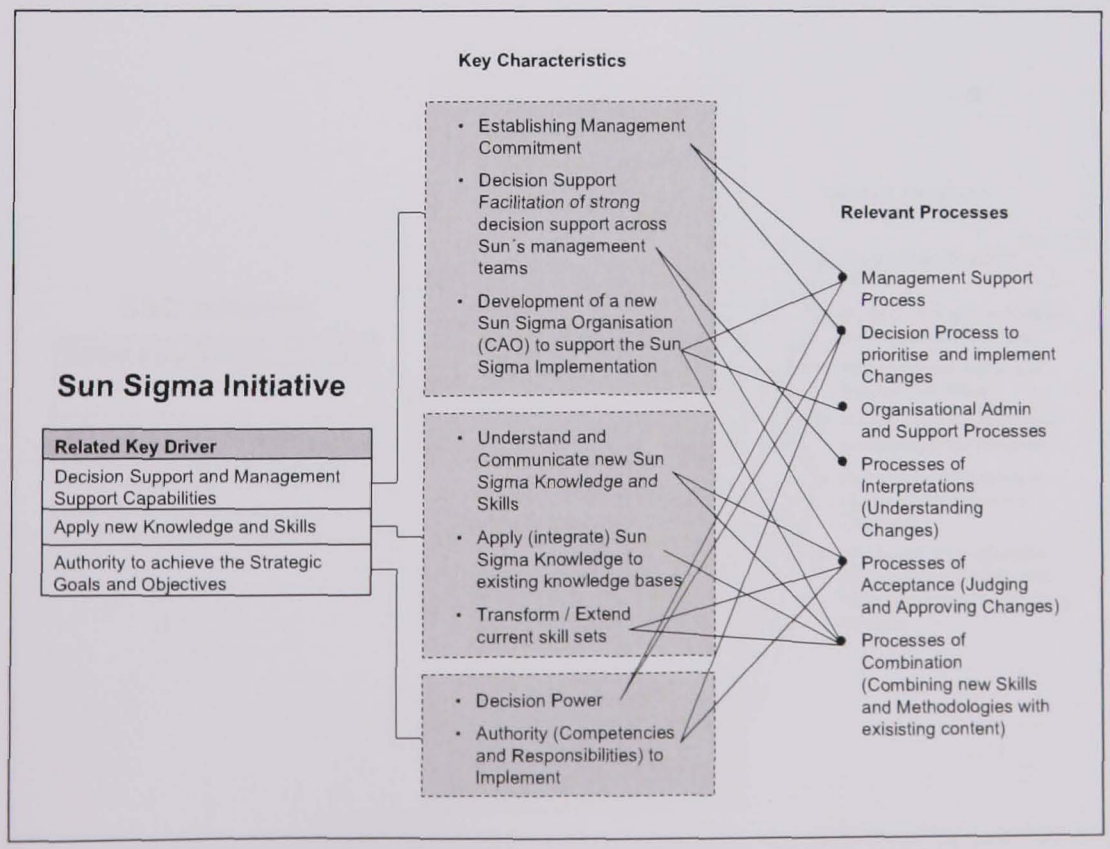

## 14 Summary of CRM Convergence Initiative Interactions



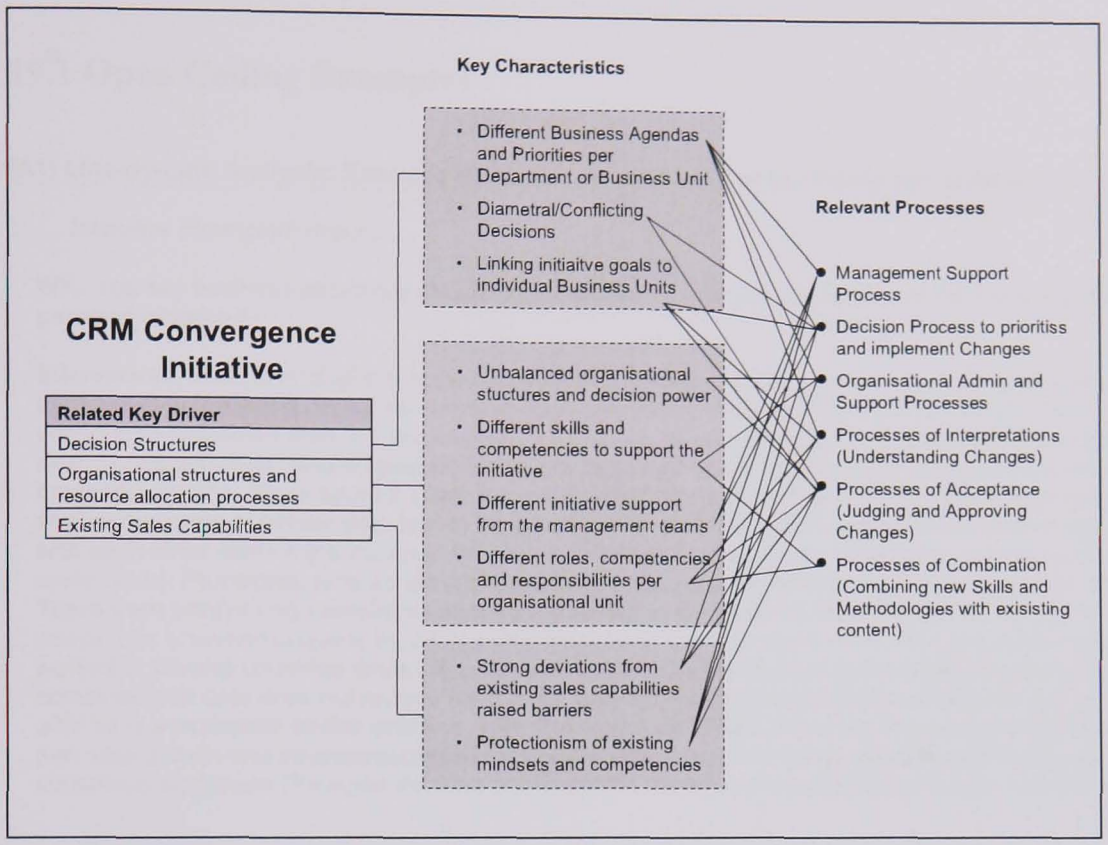
# 15 Summary of Balanced Scorecard Initiative Interactions



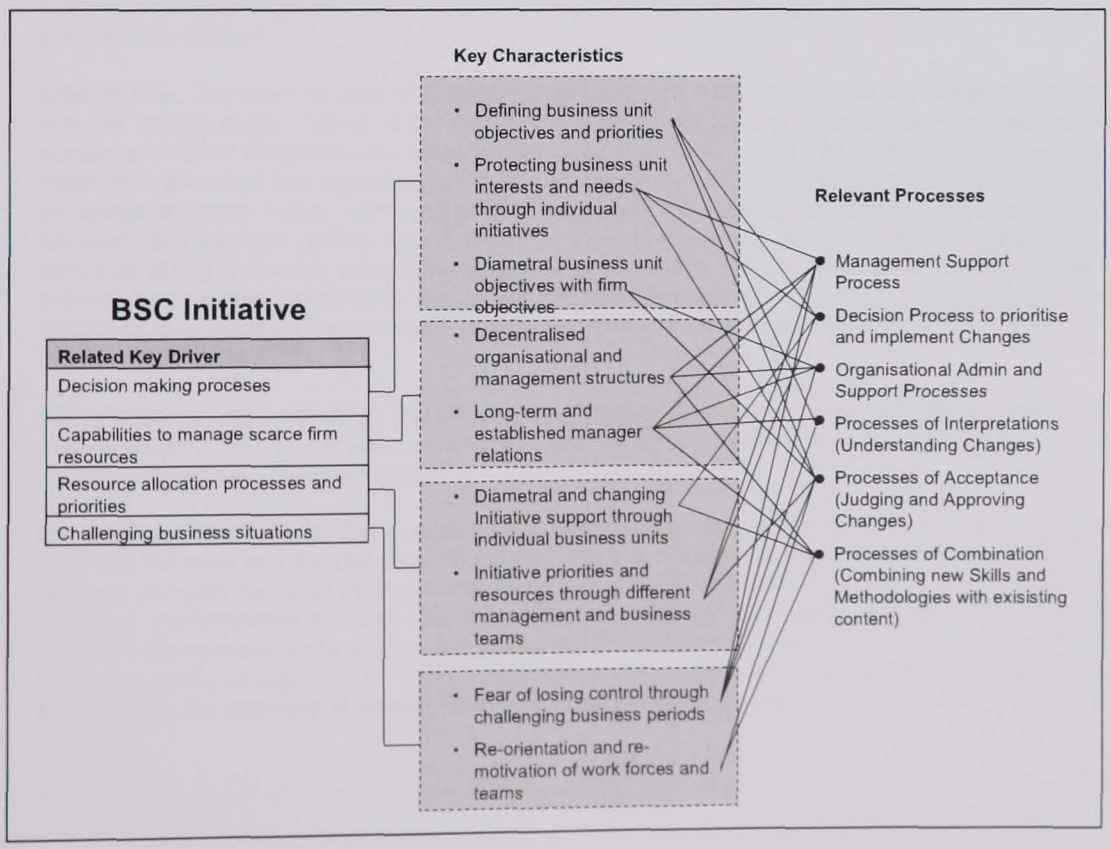

# 16 Analysis of the Sun Sigma Initiative Driver



# 17 Analysis of the CRM Convergence Initiative Driver




# 18 Analysis of the Balanced Scorecard Initiative Driver



# 19 Data Analysis

## 19.1 Open Coding Examples

**(A1) Line-by-Line Analysis: Example of the Scope and Value of the Passport Initiative**

*... Interview Example/Extract ...*

**WK:** You say business approvals should be simplified. In your opinion what was the most important value of the passport initiative?

**Interviewee:** Well, first of all it is because of history. A salesman or account manager needs about 3-4 different approvals –in the worst case if he wants to push something through (Simplification of approval process will reduce admin for a salesman from 3-4 approvals to 1). Especially, salespeople need approvals from finance or service side. Those activities need a special service management approval. Or high end products need a review regarding the technical side. Since about 2 years the whole Yield Management is involved and is one main part. That is why always the same or similar data had to be entered in to different tools because these tools were not connected with each other (Before the passport initiative – different tools exist and data were country specific and not compatible). Processes, time zones and countries, depending on how strong the country was, served themselves. There were always only complaints about it which had to be taken by the management (Customer complaints couldn't be analysed properly by the management because of process, tool, and data inconsistencies). Although it worked in several countries there will always be complaints which have to be taken by above levels. Now it was all combined that data does not always have to be entered, like basis information which are always necessary and after all is a worldwide similar process. This one works simplified. It is a big step in a positive and negative way - part wise to train and educate countries or regions, or the fact that things are different if you want to simplify something worldwide (Passport initiative standardises the worldwide approval process and related data).

...

**(A2) Line-by-Line Analysis: Example of Interactions between the Passport and the CRM Convergence initiative**

*... Interview Example/Extract ...*

**WK:** How are you organised within the different project and initiatives? How do you communicate and act between the initiative teams?

**Interviewee:** Depends on what is connected with my field. I first of all have the main contact and the cooperation with the vertical project teams of the different initiatives. We belong together but there are interfaces and points of contact with other vertical teams when implementing and executing. For example, the Siebel CRM Convergence initiative is a vertical line regarding project and all their project development activities. The horizontal task is not in my scope anymore - other members of Graham's team are responsible for that. They have the main contact with the team. But we have got the approval tool and the interface with Siebel to CRM regarding execution. We make sure everything is working even if the approval project team of the Passport initiative and CRM initiative work independent on the vertical level. Below you see the influence of these vertical development teams through horizontal overlapping (The passport initiative has different interdependencies like with the CRM initiative (Siebel teams).

**WK:** For better understanding: The Siebel CRM team is next to you. They do their project work and you do your project work? (CRM/Siebel teams improve customer process and Passport team improve customer processes next to each other – Redundancies)?

**Interviewee:** That is right. But in development area some are more focussed on CRM deployment and me on the Approval Process and the Balanced Scorecard Project. There are always interfaces between the projects which connect you with the other deployment (There are always interfaces to other development and deployment projects). It is important to make sure everything is on the right line because there are always (different projects always interdependent/interact to each other) (project interactions are based on necessary changes, improvements and adjustments e.g. CRM/Siebel and Passport initiative) necessary changes, improvements and adjustments, for example at Siebel, which we need for the approval tool.

...

**(A3) Line-by-Line Analysis: Example of Sun Sigma Initiative Implementation Challenges**

*...Interview Example/Extract ...*

**WK:** What was the Sigma program designed for? Was there a business case for Sun Microsystems, Inc. like increasing its competitiveness in the market?

**Interviewee:** That is a connection which was never really outlined to our teams, me and my colleagues I guess. Of course, we get all this general benefit Sun Sigma messages but at the end of the day we had the customer who requested to increase speed of resolution. We lost our interest and motivation over time to think how Sun Sigma could help us to increase profitability or leverage our projects to reach our strategic objectives (Sigma acceptance decreased overtime – customer problems were still the same).

**WK:** Was it not communicated from the top management to the project leaders like you?

**Interviewee:** It wasn't really communicated well enough (Low communication profile about the Sigma Initiative). We had some general roundtables and meetings but we never touched the core of the problem across the different project teams and we still didn't really now what the teams next to us are doing and how we could leverage their work to solve our problems (no communication infrastructure – different Sigma teams couldn't leverage their work and results). I think one of the mistakes we made is that our people expected that Sun Sigma would save all the problems of sun (Failure that Sigma would solve all relevant problems of the organisation). We still had a to isolated project view (to isolated project view), all teams focused on its own project charter instead (teams were focused on their little project frame) of defining and understanding the big picture and project landscape (no big picture and project landscape).

**WK:** How would you describe those challenges during your project work?

**Interviewee**: We had many discussions in our teams and other ongoing key programmes about that point and we identified three lags of the success of a company: the leadership, the strategy and the execution. And Sun Sigma is focusing on strategy execution, its how valuable and efficient we improve our processes. But we cannot solve challenges like leadership, strategy, organizational weakness and challenging interdependencies between ongoing key programmes (Interdependencies between initiatives can be challenging) through Sun Sigma (Sigma cannot close gaps in leadership, strategy – it's a process improvement approach).

...

**(A4) Line-by-Line Analysis: Example of the Balanced Scorecard Initiative Interactions and Challenges**

*... Interview Example/Extract ...*

**WK:** if you decided case by case how you did make sure to address the big picture. I mean, maybe the Balanced Scorecard initiative challenging interactions and dependencies to to other ongoing initiatives?

**Interviewee:** We didn't discuss the project interdependencies (less focus on key programme interdependencies). We decided case by case, that was as well the way how we allocated our programme resources. I can imagine the advantage of discussing the big picture but we didn't (Potential advantage of analysing and discussing programme interactions and interdependencies). I'm not sure if every executive board member would agree on having the same big picture in mind (Many strategic pictures and priorities of decision makers). For example during one EMEA executive board meeting, we had a discussion to consolidate our ongoing initiatives and activities based on the Balanced Scorecard goals and priorities. Everybody had its own goals, key projects and based on those goals our VP's started to argue how their initiatives support our strategy and which initiative is relevant for us and which not (changing/drifting priorities and objectives of ongoing initiatives). At the end we agreed on a prioritised list of key programmes.

**WK:** how did you make sure to set the right priorities for ongoing initiatives?

**Interviewee:** More and more we had long discussions and negotiations, but at the end we came up with a list of prioritised initiatives and activities. Our key projects increased their scope more and more to fit to your balanced scorecard goals and priorities (Drifting goals and objectives of ongoing key programmes). It is difficult to be objective, all our initiatives are relevant and useful, but we had to decide because we didn't have the money anymore to finance all our initiatives (More and more difficult to measure, judge and priorities ongoing initiatives).

**WK:** Did you have a more objective approach to discuss the priorities?

**Interviewee:** Finally we implemented a balanced scorecard into our management system (Balanced Scorecard should enhance the firm's current management system). You know it very well. In the future the scorecard will hopefully be used more and more to challenge our investments to drive strategy execution. The scorecard is an effective approach to set priorities, but I'm not sure if we will be able to sharpen the execution focus in our ongoing key programmes and reduce project execution complexities (Still challenges between ongoing initiatives and growing complexities) and if every executive in our company understand the balance scorecard concept.

...

## (B1) Identification of Concepts (Example/Extract):
## Initiative Properties and details on Interaction between ongoing Initiatives (e.g. CRM Convergence Initiative)

...

**Relevance to implement an approval Process – Passport Initiative**
- First Approval started with intro of new product (E10k)
- Simplification of worldwide approval tools and processes – Passport Initiative
- Customer complaint's need to be analysed properly – unified process (8.1)
- Process standardisation

**Affected organisations of the Passport Initiative** (8.2)
- Service and Finance Org. were affected
- Initiative are started and managed by sales operations

**Communication (type of interactions) between different initiatives** (8.3)
- Project updates and changes are communicated among different project leads
- Regular updates are visualising issues for delay
- Deployment teams have regular update calls – sufficiently
- Change program team members do not exactly know who is involved from the Top Mgmt. Team

**Escalation and decision process between different initiatives**
- different program teams are often equal, decision from above
- deadlock between initiatives
- Line Mgr. Decide based on his goals
- interdependencies are discussed through escalations
- Escalation end with a decision of a line manager
- different teams try to informal convince the line manager
- communication is mostly verbally
- time delays because of many discussions (8.8)

**Decision criteria's and different Rules between different initiatives**
- Decisions are supported by the overall business objectives – simplify business
- orientation of decisions are based on overall company goals (8.9)

**Interactions between different ongoing initiatives**
- Passport initiative has interdependencies between CRM initiative etc.
- Redundancies – Passport and CRM initiative improve customer processes
- Passport and CRM initiative exchange real-time data
- Interfaces between deployment and development teams
- Initiatives interdependent to each other
- interdependencies are mostly improvements and adjustments (8.4)
- More than one project interface per initiative
- Different initiatives have overlapping in their user groups

**Challenges of interactions between different ongoing initiatives**
- prioritisation of resources are difficult to manage between different initiatives
- Interdependencies between different initiatives are resource responsibilities
- Initiatives (e.g. Passport, CRM) are managed without the "Big Picture" (8.6)
- No clear resource responsibilities to decide on resources for different initiatives
- "Ping-Pong" Games between different initiatives
- To set priorities – escalation goes first
- communicational problems stimulate often escalations
- different deadline increase complexities to set resource priorities
- narrow-minded program team members - focused only on their project
- roll-out deadlines are critical because of interdependencies between different initiatives and org. environments

Indexed Data Source

**Organisation of key Initiatives**
- After 2001 Sun organised core projects into 4 core project frames
- 4 core project teams are org. by themes
- Escalations are executed along the reporting lines
- SBAP converted into DDA Team Deployment & Adoption Department (8.5)
- horizontal = deployment teams
- vertical = development teams

**Management of interactions between different ongoing initiatives**
- Interfaces are handled inside different program (change) teams
- Regular updates between teams – conf-calls, meetings and online presentations (8.7)

**Focus and responsibilities of Initiative team members** (8.10)
- every single initiative is focused on its specific project content
- Project teams do not manage project interdependencies enough
- Change group is responsible to deploy, adapt, and manage acceptance of their Projects
- Change project development and deployment are necessary to be managed
- development/deployment need to be managed across the time zones
- deployments are managed by deadlines

**Resource Allocation of initiatives**
- Future business requirements are the planning baseline for resource allocation
- line of business mgr. Decide about resource allocation (8.11)
- resources are negotiated based on business results and goals

**Management of changing program direction within the different ongoing Initiatives** (8.12)
- project changes are managed through project management methodologies
- every initiative has a selected steering group

**Announcements of initiative progress**
- program announcements are integrated in quarterly meetings
- initiatives are concentrated on Sales and GSO themes (8.13)

**Integration of initiatives into business operations**
- every selling unit (GEM) has key contacts which are related to different change programs (8.14)
- every country has its primary contact member to establish the link between the end users and the relevant initiative
- every change initiative has its separate change program for GEM

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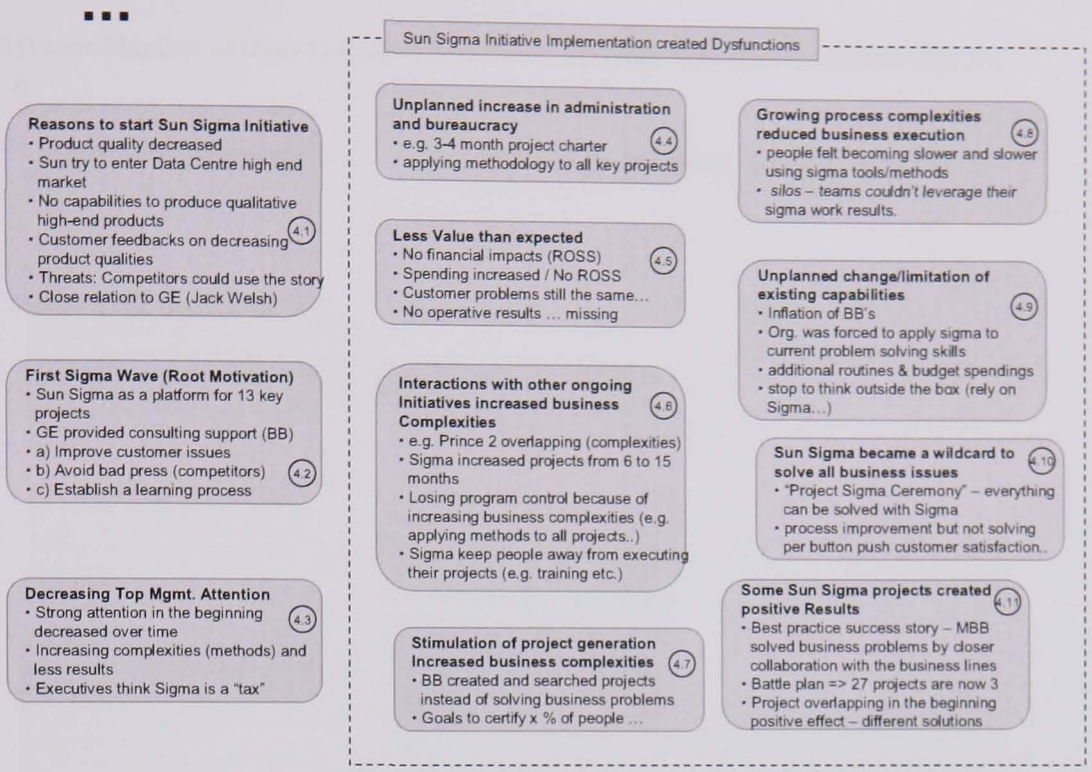
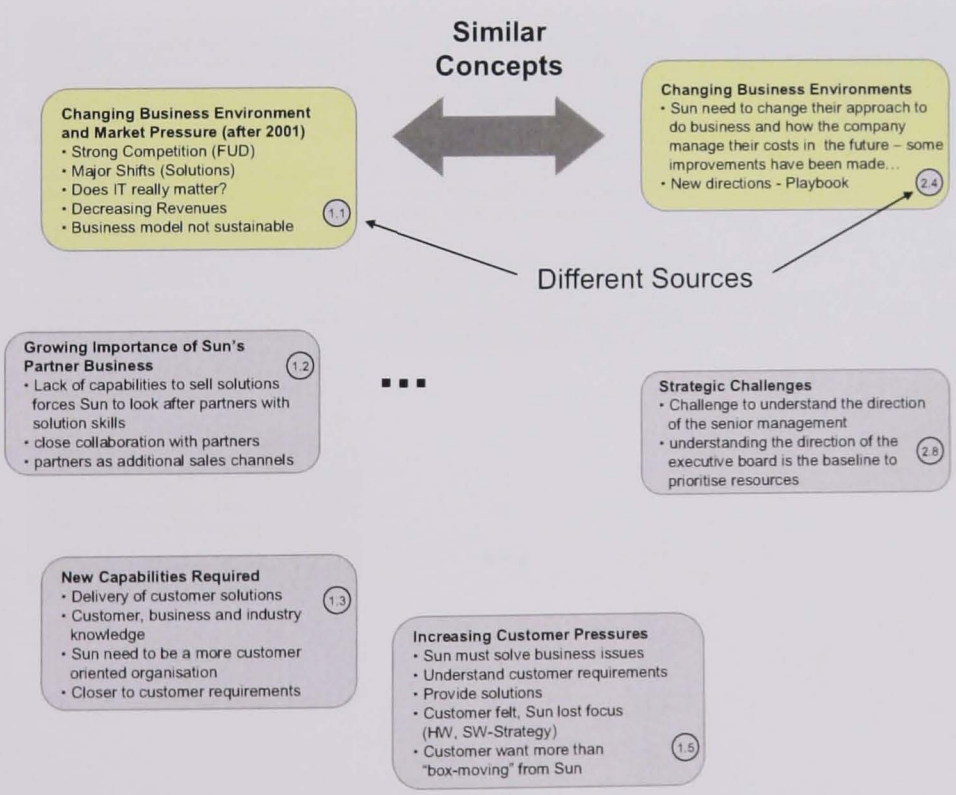
## (B2) Identification of Concepts (Example/Extract):
## Emerging Challenges and related Dysfunctions during Initiative Implementation (e.g. Sun Sigma Initiative)




## (B3) Summary of similar Concepts (Example/Extract):
## Causal Conditions of the observed Phenomenon - Market Pressure of the Company



## 19.2 Axial Coding Examples

### (C1) Identification of Main Concepts (Example): Strategic Initiative Implementation (5)

**Identified Category: 5** — **Strategic Initiative Implementation**

**Sun's Strategic Initiatives**
- not visible enough to the field teams
- Yes for change from field teams
- Executive Mgmt. detached from reality (1.7)
- Not sufficient communication of the change initiatives
- ongoing changes of initiatives

**Communication of Change**
- Strategic initiatives were not communicated properly to the field teams
- employees didn't understand why change and became reluctant to change (1.8)
- growing "tick in the box" mentality

**Strategic initiatives should stimulate adoption to changing environments**
- e.g. Change in commission plan to stimulate solution selling etc.
- e.g. change in commission plan to protect margins and revenues
- Change in commission plan should stimulate solution selling (7.4)

**Relevance of strategic Initiatives** (7.17)
- strategic change initiatives are relevant to maintain profitability and growth

**Announcements of initiative progress**
- program announcements are integrated in quarterly meetings
- initiatives are concentrated on Sales and GSO themes (8.13)

**After 2001 different change initiatives became more centralised**
- Prince 2 as the global change mgmt. methodology (7.14)
- resource allocation of change teams are centrally managed

**SCI process focus** (19.17)
- SCI are focusing 70% on back office issues and 30% on front office issues
- Sun didn't have any common back office processes in the past

**Sun Strategic Initiative Context**
- SCI must address Suns top priorities
- SCI must get all relevant resources to deliver the desired results (19.2)
- SCI relate to the highest company goals
- SCI a influenced by de-central country/ regional autonomy
- SCI require a common direction and central top mgmt. attention

...

**Organisation of Strategic Initiatives**
- After 2001 Sun organised core projects *into 4 core project frames*
- 4 core project teams are org. by themes
- Escalations are executed along the reporting lines
- SBAP converted into DDA Team Deployment & Adoption Department
- horizontal = deployment teams (8.5)
- vertical = *development teams*

**Every Strategic initiative were managed and evaluated individually**
- every strategic initiative has a stakeholder steering committee
- Decisions on strategic changes were made on quarterly basis – decision meetings (list of initiatives) (7.15)
- case by case decisions of different initiatives
- cost pressure (after 2001) forced Sun to review different change initiatives
- change initiatives must support different *business objectives*
- Strategic initiatives must create positive impact on business objectives or they were stopped (go/no go decisions)

**Sun Sigma Management Support**
- Highest Support from the Exec. Board
- Mgmt. requested to hire MBB's as a keeper of knowledge and key-driver
- Mismatch – Mgmt. decided how many employees need to be certified and the business units were forced to pay for it (tax) (3.10)
- Latest Sigma VP is in overlapping SMI position.. Assure synergies

**Resource prioritisation process**
- Resources are challenged on how they support the Sun strategy
- Requests need to go through the global strategy and project counsel (19.16)

...

**Strategic Initiative attributes** (19.3)
- based on highest company priorities everybody should know which initiatives are strategic and which are not

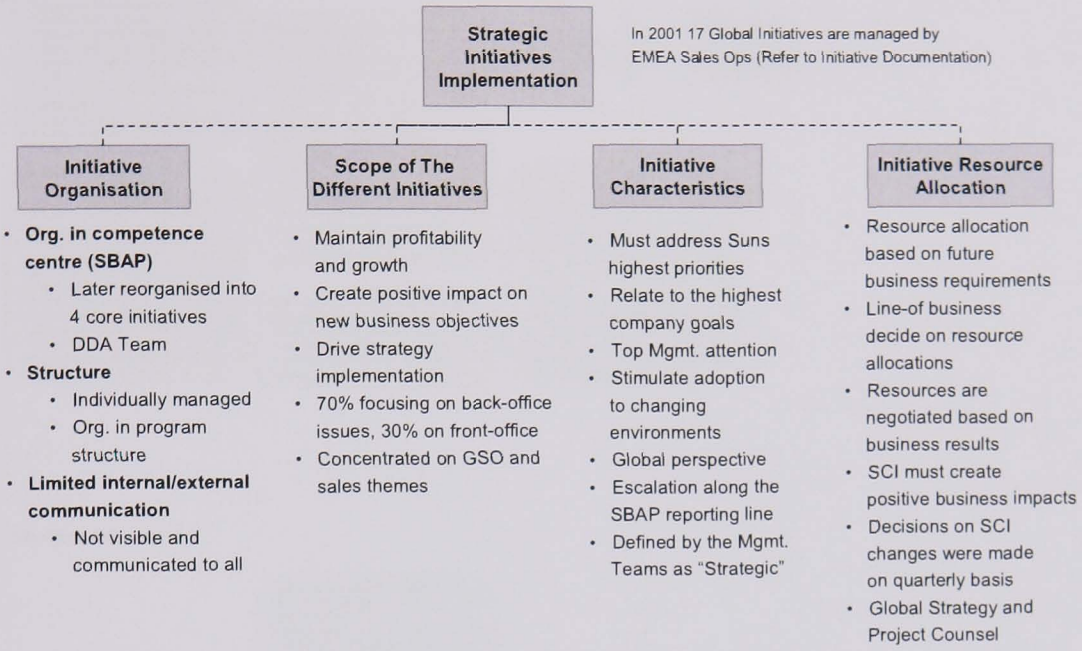
**Initiative Resource allocation process**
- Resources are justified by higher company priorities (19.4)
- *Mgmt. decisions*

**Resource Allocation for the initiatives**
- Future business requirements are the planning baseline for resource allocation
- line of business mgr. Decide about resource allocation
- resources are negotiated based on business results and goals (8.11)

Identified Category → **Strategic Initiative Implementation (Characteristics)**

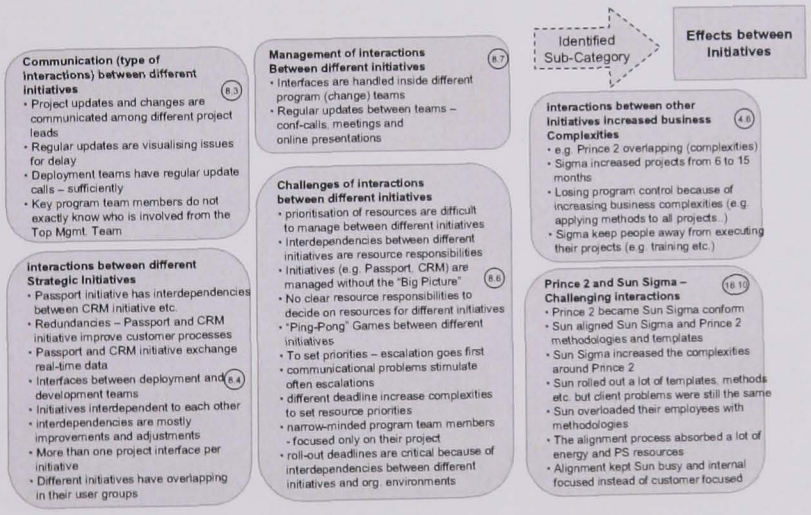
## (C2) Main Concept Structure (Example): Strategic Initiative Implementation (5)

### Connections between Categories of Strategic Initiative Implementations




## (C3) Identification of Main Concepts (Example): Challenging Initiative Implementation Effects (7)

**Identified Category: 7**



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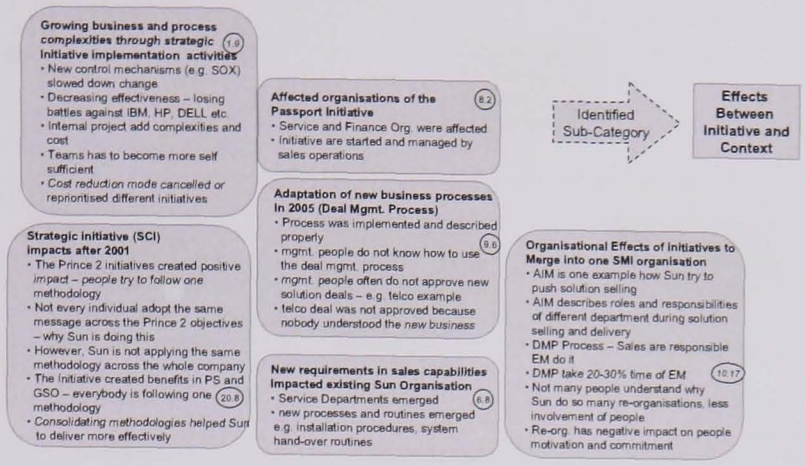
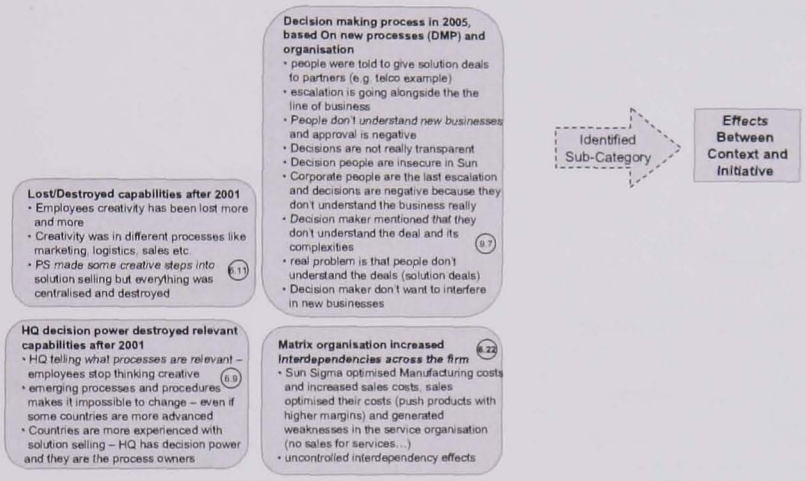
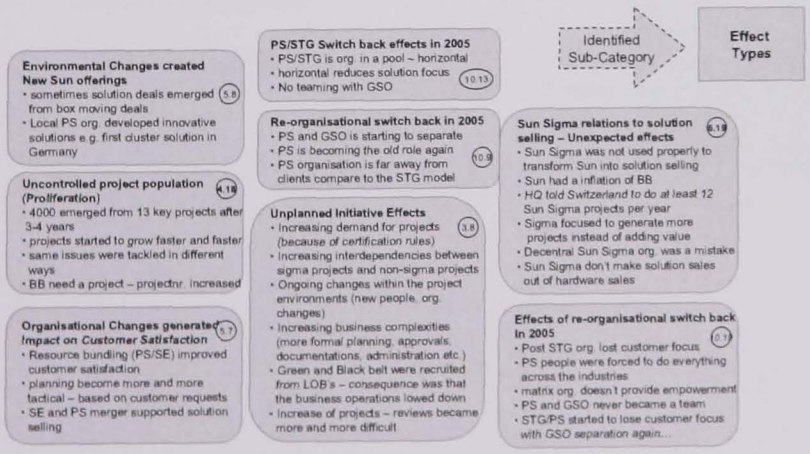



**Identified Category: 7**

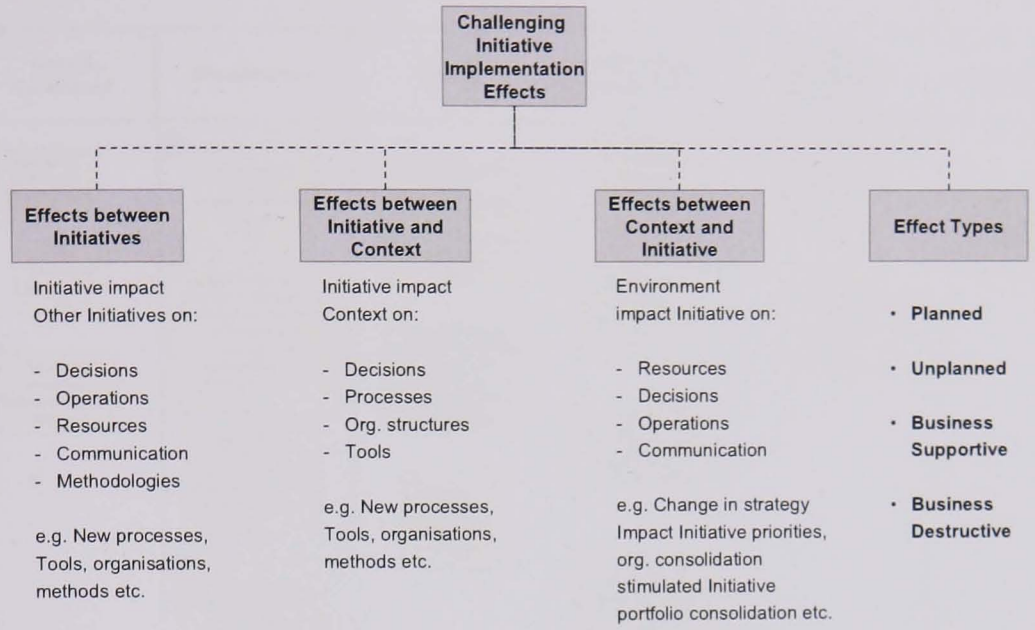



**Identified Category: 7**



## (C4) Main Concept Structure (Example): Challenging Initiative Implementation Effects (7)

### Connections between Categories of Challenging Initiative Implementation Effects

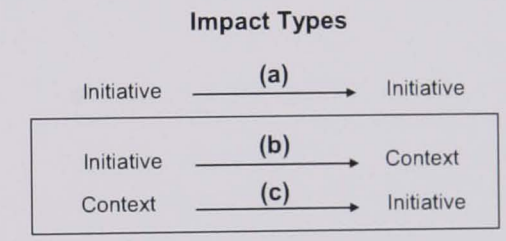


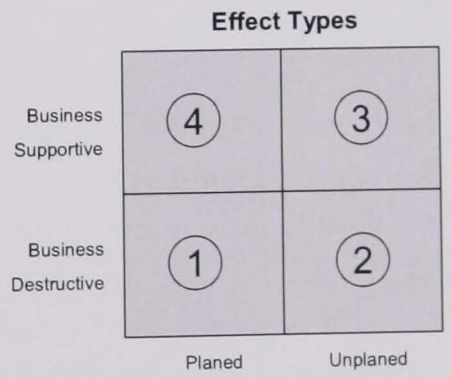

### Types of Identified Dysfunctions

**Identified Category: 7**

**Dysfunctions:**

- Bi-Directional Dynamics through Initiative Interactions
- Impacts on Resource and Knowledge Base
- Different Types of Dysfunctional Effects



## 19.3 Selective Coding Examples

### (D) Final Paradigm Model of Strategic Initiative related Dysfunctions

| Causal Conditions | Phenomenon | Context | Intervening Conditions | Action / Interaction Strategies | Consequences |
|---|---|---|---|---|---|
| Changing Business Environment (1)<br>New Business Pressures (2)<br>Strategic Initiative implementation (SI) - (5) | (A) Challenging Initiative implementation Effects (7)<br>Sun business operation Challenges And strategic initiative management capabilities during strategic change periods (14)<br>Emerging Resource Complexities from Strategic initiative implementation (3)<br>(B) Challenging Dependencies between strategic initiatives and the organisation (8) | Improvements Trough Sun Sigma, CRM and Balanced Scorecard initiative (16)<br>Sun strategic management during strategic Initiative implementation periods (13)<br>Suns strategic direction (15) | Solution Selling Barriers (12)<br>Suns Business Partner Implications (4)<br>Sales Transformation: Solution Selling - (11)<br>Sun Service Organisation Transformation Challenges (17) | Resource Allocation Processes (10)<br>Strategic initiative Operations (6) | Selective Resource Management (9) |

(A) = Strategic initiative related dysfunctions

(B) = Interactions of Strategic initiative implementation